

# MANILI <br> ASTRONOMICON 

LIBER II

EDIDIT
H. W. GARROD

COLLEGII MERTONENSIS SOCIVS

OXONII<br>E TYPOGRAPHEO ACADEMICO<br>M DCCCC XI

## HENRY FROWDE PUBLISHER TO THE UNIVERSITY OF OXFORD LONDON, EDINBURGH, NEW YORK TORONTO AND MELBOURNE



## ROBINSONI ELLIS

VIRO DE POETIS ASTRONOMICIS INSIGNITE MERITO ET
' NOSTRAE MVLTVM QVI PROFVIT VRBI'

Digitized for Microsoft Corporation by the Internet Archive in 2008.
Erom.University of California Libraries. May be used for non-commercial, personal, research, or educational purposes, or any fair use.
May not be indexed in a commercial service.

## PREFACE

The second book of the Astronomica is at once the longest and the most difficult. In this book Manilius passes from the popular astronomy with which he is occupied in Book I to the proper business of the mathe-maticus-to an astrology based on geometrical and arithmetical calculations. He passes, that is, from a subject moderately diverting to one difficult and repellent. Many students of Latin poetry make their way through the first book. A moderate scholar can understand it, and it has recently been well edited. But few, probably, of those who read the first achieve also the second book. The 'signorum lucentes undique flammae', the ä $\sigma \tau \rho \omega \nu$ ó $\mu \eta$ ' $\gamma v \rho \iota s-$ all that is picturesque and inviting. But when we come on to triangles, quadrangles, hexagons, dodecatemories, and the dodecatemories of dodecatemories-then our faith in a Providence which has made the beautiful so hard begins to fail us. And not only is the second book hard, but the commentaries upon it are hard too. No one commentary suffices; and even when he has all the commentaries before him, the student will still be in want of a means of approach to them-for none of them furnishes a real Introduction to Manilius. Some of them, indeed, are often not very honestly put together. Even Scaliger, with his encyclopaedic learning, is not above dissembling in a base silence his occasional ignorance-though mostly he is unwilling rather than unable to help the mere beginner: for he is a great man writing for his peers. Du Fay, who alone of editors sets out to simplify Manilius, brought to some capacity for teaching not only a loose conscience but a very limited knowledge and a faulty scholarship.

## PREFACE

The present Text, Commentary, and Translation, together with the Introductions prefixed to them, are designed to carry the casual student over Book II into clearer regions (though Book III might be clearer than it is) with less cost to his time and patience than he must ordinarily incur. The Translation attempts to give an accurate rendering of the Latin, and makes little pretension to literary quality. Indeed, the character of Manilius' Latin is such that the helpfulness of a translation is not unlikely to be in inverse proportion to its readableness. The temptation to paraphrase is very strong. Yet any one who has constantly used Pingré will be aware of the disadvantages of this kind of rendering, and will perhaps be tolerant of a version in which literary form is deliberately subordinated to utility. Even when Manilius is not employing technical language his sentences are often strangely intractable. Any one who will trouble to make for himself a rendering of the first nine lines of this book will know at once what I mean. His technicalities, moreover, are perhaps more embarrassing than those of any other author who has tried to versify a scientific terminology. What skill and sympathy can achieve in the translation of Lucretius Mr. Cyril Bailey has recently taught us. But we have yet to learn how to deal with a poet who versifies the multiplication-table and sets to the measure of Vergil the reasonings of Euclid. One particular difficulty I may be allowed here to mention, towards which I have not attempted to take up a consistent attitude. Quarta signa in Manilius are, in accordance with an inclusive method of reckoning common in Roman writers, signs separated from one another by two intervening signs. The clear sense of such a phrase can only be hit by a rigmarole. But I have found it in practice not possible to maintain throughout a single rigmarole for each such phrase as it recurs in a variety of contexts.

In my Commentary I have made it my first object to interpret Manilius by himself-to find out what he wrote and to explain that. The understanding of him has, I think, recently been somewhat retarded by an over-anxiety

## PREFACE

to compare him with, and make him conform to, his supposed sources. And my notes are to some extent a protest against the modern какól $\theta$ es of Quellenforschung. At the same time I have tried to give the reader some notion of the relation in which, in perplexed passages, Manilius stands to our other authorities. This has occasionally compelled me to notes of a length so considerable that an Excursus might be thought to have been more desirable. On the whole, however, I have thought it well to deal with difficulties as they arose. The practical discomfort of a Commentary in which the principal difficulties are always waiting round the corner seems to me greater than the moderate annoyance of a disproportion in the notes. And in this matter I am in agreement with the practice of previous editors of Manilius. Those passages, I may add, from other authors, whether Greek or Latin, by which I have tried to illustrate either the thought or the language of Manilius, are in the main my own collection. Where I have cited a passage already adduced by some previous editor I have usually noted that fact. In interpretation it will be found that I have in a great many passages been compelled to take a different view from that commonly received. I have not done this rashly ; and I do not need to be told that one should think twice before one disagrees with Scaliger. But it would, I think, argue an inert mind if after four years' study of an author whose subject and style are alike so difficult, I had not found in several passages something to offer which I thought was truer than what had been said upon them previously.

Haupt ${ }^{1}$ has remarked truly that the text of Manilius is more corrupt than that of almost any ancient author. Owing to the fact that my text is accompanied by a translation I have been obliged constantly, in framing it, to come to a definite decision at places where, if I were not translating, I should have preferred to place an obelus. In my Apparatus Criticus I have recorded only the readings of

[^0]
## PREFACE

the MSS., together with such emendations as I have placed in the text. Only so could I achieve clearness, for there is hardly a line in Manilius which has not been harassed by conjecture. Yet this method was bound to do injustice to the many scholars who have exercised brilliant talents upon the emendation of the Astronomica. Accordingly I have added an Appendix, consisting of two parts. In the first part will be found select lections from the editions prior to Scaliger ${ }^{1}$, and in the second the principal conjectures from Scaliger onwards. The first part has cost me much labour, and has brought me little reward. Yet I have, I think, exhibited the interrelation of the edd. vett. as it has not been exhibited before; and I have restored a good many emendations to their first authors-a service for which I shall perhaps not be thanked by scholars who, looking for their conjectures in Part II, find them in Part I against the symbol $E$ (=editores omnes ante Scaligerum). I have not attempted a complete collation of the edd. vett. But I have cited those readings which seemed to me to possess interest, making it a rule, wherever I cited a given reading, to cite all the editions at that point. For lines 1-500 I have quoted all the editions wherever Jacob cites Molinius ${ }^{2}$ : for the rest I have made my own selection. The chief value of my citations consists, I fancy, in their revelation of the greatness of Scaliger. Scaliger had before him, when he produced his first edition, merely some one or other of these miserable editiones ueteres. It needs some familiarity with the older texts before one realizes with what justice he speaks of Manilius (to Henri III) as of an author-

Quem recenter a nigris
leti tenebris imminentis, a dirae obliuionis uindicauimus fato.

[^1]
## PREFACE

If he had said plainly that he had brought Cosmos out of Chaos it would not have been far from the truth.

The second part of my Appendix does not pretend, any more than the first, to be exhaustive. The editors whom I have cited most often are naturally Scaliger and Bentley. These two names are so important in the history of the text that an editor owes it to his readers to cite rather freely the emendations which attach to them, even when these are not prima facie particularly attractive. From other editors or annotators I have cited sparingly. I have occasionally noticed in my Commentary suggestions to which, for reasons of economy, I have not given a place in the Appendix. I had at one time designed an Appendix -somewhat on the model of the second volume of Wecklein's Aeschylus-which should include all the emendations known to me. But an Apparatus ought to be-as I reflected-a study in the pathology of a text, and not a study in the pathology of editors.

I have spoken elsewhere (Introduction, pp. lxxv sqq.) of my obligations to works dealing specifically with Manilius, and have attempted some estimate of those works. I must here mention one or two books which deal with the subject of Astrology in general, to which I am conscious of a debt. Indispensable to every student of Manilius is Bouché-Leclercq's L'Astrologie grecque (Paris, 1899), and the use that I have made of this learned and well-written book will be everywhere easily traceable. Indispensable also is Boll's Sphaera (Leipsic, 1903)-less readable than Bouché-Leclercq and (outside Book V) less helpful for the special end of Manilian study, but containing a wealth of valuable material not elsewhere accessible. The more I study Manilius, however, the more I feel that both these writers are unduly severe upon his shortcomings. My debt to Boll extends also to the Astrological Catalogue of Boll and Cumont. Of Cornewall Lewis' Astronomy of the Ancients I have not been able to make much use. It is necessarily of little service to the astrologer, and though it is praised by Ellis, it is, I think, on the whole a work

## PREFACE

of second-rate scholarship. S. Günther's Astronomie u. Astrologie, in Müller's Handbuch V. i. 64-95, has no pretensions to being anything more than a mere sketch of its subject.

In the Dictionaries, Schönfeld's Astronomie in Pauly's Real-Encyclopädie is no longer useful. It is replaced, for Astrology, by Riess' article in Pauly-Wissowa-an article which has great value as a bibliography and as a history, but which as an outline of the principles of Astrology (the author concerns himself mainly with the Tetrabiblos) is not particularly helpful. Martin's Astronomia in Darembert et Saglio is still useful. The articles Astrology and Astronomy in Smith's Dictionary are somewhat slipshod and antiquated. I may add that the best English Introduction to Astronomy is that of Young (Textbook of General Astronomy by C. A. Young : Boston, Ginn \& Co., 1899).

I have many debts of a more personal kind. Dr. P. Thielscher not only very generously lent to me his collation of $L$, and instructed me in many places as to the true reading of $M$, but he was also kind enough to correct in proof the record of readings in my Apparatus. I owe it to him, and to the Rev. C. T. H. Walker-who lent me his collation of $G$-that my Apparatus is fuller and more accurate, as I believe, than that of previous editors. Mr. Walker also read my Commentary, both in MS. and in proof, and his wide knowledge of Astrology has been of great service to me. Prof. D. A. Slater read my Translation, and made many valuable criticisms. Prof. J. S. Phillimore supplied me with a number of parallels between the language of Manilius and that of Propertius. To Dr. J. K. Fotheringham I am indebted for information upon Roman Chronology; and to my colleagues Mr. A. L. Dixon and Mr. E. W. B. Gill for assistance in Astronomy. Mr. Bywater helped me everywhere, always ungrudging of his time, and always ready with sympathetic counsel. Indeed, there is no part of this book (save its faults) which does not owe something to him. Scaliger-who was never half-hearted either in his

## PREFACE

enthusiasms or in his dislikes-wished that Manilius might be read in all the schools. Milton in his treatise Of Education seems to have entertained the same wish. For myself, I wish Manilius no such doubtful fortune. Yet I do greatly desiderate the teaching in the schools of something that used to be taught there, of something that would make the reading of Manilius easier for the average student-I mean what our grandparents called 'the use of the globes'. In an age which seems to be moving inevitably to the depressing ideal of 'secular education', it might yet be possible, by teaching the elements of Astronomy, to keep imagination still alive in the land. I have two celestial globes before me as I write. The first I acquired easily, since it is a hundred years old, and a century ago celestial globes were common objects. The second, which is a modern one, was ordered for me in London, and took a month to procure. That such a thing should be wanted at all was a portent; and the salesman gravely inquired of me whether I wished it 'coloured politically'. Sic etiam magno quaedam respublica mundo est. Thus do our political animosities taint even the citizenship of heaven, and there survives in our great statesmen after their merited catasterism the passion for painting red the map of the universe.

This volume, I should say finally, is an enlargement of a special course of lectures delivered in Michaelmas Term, 1909, under the auspices of the Common University Fund. I have to express my gratitude to the Delegates of that Fund for the opportunity thus afforded to me of devoting myself with an unembarrassed conscience to a subject which lies so much outside the routine of our ordinary studies here. It is possible, of course, to stray both too long and too far from the beaten track. The complaint of time wasted upon 'second-rate authors' has often a good deal of justice in it. Yet, on the whole, the more common fault is to indulge too little in ourselves, and to stimulate too little in others, that curiosity which is the necessary relish of all study. Nor would I submit to rank Manilius

## PREFACE

among 'second-rate authors'. Bentley, after all, went so far as to say that Manilius and Ovid alone among the Latins possessed 'wit'. What exactly Bentley understood here by 'wit' I do not undertake to say. But I cannot take leave of Manilius without expressing the sense which I have of the fine poetical quality of much of his work. He possesses something more valuable to a poet than witpersonality. He is a clear soul in a turbid age, and a poet whose utterance is still genuine and fresh in a period of factitious speech. To one or two sentiments that are a permanent part of all reflection in confused and sceptical times he has given beautiful expression. No one among the ancients has drawn out more movingly the contrast between the disorder of human history and the calm and continuity of the workings of nature. When the Greeks overthrew Troy, already then as now 'Arctos and Orion moved with opposed fronts'. No one has expressed more affectingly the beauty and the rarity of human friendship. It is not in nature to repeat the miracle of Pylades and Orestes. No pagan has spoken more Christianly of the need in human life of gentleness. The Ram is ill mated with the Lion and the Centaur. No one of the poets of Stoicism has heard more clearly the call of the universe to its children, or felt more powerfully the homesickness of humanity aspiring to a reunion with that which is divine. 'Of heavenly origin,' he says, ' is that mystery which is ever calling us heavenward to the fellowship of all that is.' But with all this aspiration there goes the sense of defeat. It is, perhaps, this unuttered sense of defeat breathing through all Manilius' poem which gives to it its deepest quality. He comes before us like his own Engonasin-the nameless sign that sinks beneath the weight of some overmastering toil unconjecturable.

> Who set in heaven that fainting fire ? Who bowed thee with a pain unknown, And bade above thee sound the Lyre Beneath thee float the Virgin Crown?

## PREFACE

Who left thee nameless in the signs?
Who wreathed so nigh the Serpent's coil?
Who made in heaven whatever shines
So puissant, yet broke thee with toil ?
The hand that fixed thy fate in fire, And wrought to melancholy flame
The load that bows, the knees that tire, The agony that knows no name:-

That master hand and merciless Made even as thou art thy sons:
The strong knees in obscure distress Sink slowly under him that runs.

Ah! not for them the Crown, the Lyre:
They see the Serpent's lifted head,
They feel his hot breath's stinging fire, Their hands hold off a subtle dread.

The goal that lesser souls attain Recedes before their nobler strife,
Their name none knoweth, nor their pain: These are thy failures, Lord of Life!

## CONTENTS

PAGE
INTRODUCTION ..... XV
I. The MSS. of Manilius and their Interrelation : The Three Principal MSS. ..... xV
Appendix i ..... xxxiv
Appendix ii ..... xxxix
II. Other MSS. and an Attempted Classification ..... xlii
III. Manilius and his Editors ..... lviii
TEXT, TRANSLATION, and APPARATUS ..... 2
COMMENTARY ..... 61
EX EDITIONIBVS VETERIBVS LECTIONES SELECTAE ..... 155
DOCTORVM VIRORVM VSQVE A SCALIGERO CONIECTVRAE ..... 159
INDEX TO INTRODUCTIONS . ..... 162
INDEX TO COMMENTARY ..... 165

## INTRODUCTION

## I

## THE MSS. OF MANILIUS AND THEIR INTERRELATION


#### Abstract

'Loxiae oracula mihi audire uideor quotiens Manilium lego : ita multa sunt in eo turpiter conturbata, lacera, mutila, prodigiose obscura.'-Carrio. 'Infelix fatum illius poetae ut neque posteri eius meminerint neque eius exemplaria ulla bona fide scripta extent.'-Scaliger, Epist. 1627, p. 165.


## THE THREE PRINCIPAL MSS.

There are twenty-two MSS. of the Astronomica still extant. These fall into three families, which may be designated the Belgian, the Italian, and the Hungarian. The Belgian family is represented by GLCV Marc. ; the Italian by $M V^{2} U R H$ Caes. ; the Hungarian by the Paris MS. Par. 8022 ; the Munich MS. Mon. 15743 ; the two Oxford MSS., $b$ and $o$; and finally seven MSS. from Italian libraries, Vatt. 1-4, Pal., Barb., Laur. Of these three families the last and most numerous, the Hungarian, may safely be said to have no importance at all, being merely a product of a chance fusion of the Belgian and Italian families. This fusion was perhaps brought about in the Hungarian libraries of Ofen and Gran under the auspices of Vitezius, Galeotto, and Regiomontanus. ${ }^{1}$

Of the five MSS. of the Belgian family two only can be certainly said to possess independent value, $G$ and $L$. Probably $C$ is a copy of $L$, and still more probably Marc. of $C .{ }^{2}$ The six MSS. of the Italian family, again, are really reducible to one. It is becoming generally agreed among editors that $V^{2} U R H$ Caes. are all derived, mediately or immediately, from $M .^{3}$

Our twenty-two MSS. of the Astronomica are thus brought

[^2]
## INTRODUCTION I

down to three : GLM. Of these the oldest is perhaps $G$, though recently Traube ${ }^{1}$ (with hesitation) and Thielscher (with confidence) have claimed a superior antiquity for $L . \quad G$ owes its notation to the monastery of Gembloux, where it was at one time lodged : 'the most sovran copy of Gemblau', Bentley calls it. ${ }^{2}$ It belongs now to the Bibliothèque Royale in Brussels (10012), and is assigned to the eleventh century. A very inaccurate collation of it made by Jacobus Susius, was sent by Gifanius to Scaliger, who used it for his second edition ${ }^{3}$ (1600). $G$ had been employed by Carrio, who tried to pass off some of its readings as emendations of his own. ${ }^{4}$ Scaliger made through Lipsius some attempt to obtain Carrio's ('Stellio' he calls him ${ }^{5}$ ) collation, in order to supplement that of Susius, which he perceived to have been carelessly made. ${ }^{6}$ The Bodleian copy of Prückner's
${ }^{1}$ Phil., 1907, p. 122.
${ }^{2}$ Epp. xvii, p. 36, London, 1842. My references throughout are to this edition.
${ }^{3}$ Bechert, Leipz. Stud., r878, p. 6, says 'third edition', but the text of 1590 was merely a reprint of that of ${ }^{1577}$, not a new edition. It is noteworthy that already in February, 1574 (five years before the first edition), Gifanius had written to Scaliger from Strasburg offering to procure for him Susius' collation: Burmann, Sylloge, ii, p. 316. (Burmann dates this letter as 1578 , but wrongly surely: for (r) Scaliger was at Geneva when it was written ; (a) he is addressed in it as 'Professor Philosophiae', a position which he held only in $1573-4$; (3) his Varro is referred to as though it had appeared recently.) It would seem that when he undertook Manilius, Scaliger's primary object was not critical. He cared nothing for $G$ or any other codex; but for chronology. 'Illius opus', says Junius, writing to Lipsius, 'est ingenio satum, labore meum. Ille coniecturis quasi divinis usus est, ego librorum veterum ac non contemnendorum fulcris': Burmann, Sylloge, i, p. 411 , no. 377. But $G$ was the principal cause of the second edition. This may be seen from four letters of Scaliger-two to Casaubon, Epist., 1627 , nos. lii and lxv, two to Lipsius : Burmann, Syll., i, p. 242. (See in particular Epist., 1627 , lii, p. 177 : ' Mitto ad te $\pi a \lambda \iota \gamma \gamma \in \nu \in \sigma i a \nu$ Manilii nostri. Nam certe Virbium istum Codex Gemblacensis iterum nobis excitavit.' Cf. p. 165. 'Virbius' recurs in the letters to Lipsius, loc. cit., and again in Casaubon, Epist., Magdeburg, 1656, p. 233.) From the Ep. adv. Insulanum (Opusc. Var. 380), however, it is clear that a part-cause of the second edition was the desire to answer criticisms. In the first letter to Lipsius, Scaliger speaks as though the preparation for this second edition had taken but two months. We hear again the Gascon who read through Homer in three weeks.

- Bechert, loc. cit.
${ }^{8}$ Elsewhere 'the newt' is called in the vernacular a 'baboon', de Larroque, p. 208. The charge of stellionatus presumably refers to Carrio's thefts from $G$.
- Burmann, Syll., i, p. 242.


## THE THREE PRINCIPAL MSS.

1551 edition contains a collation of $G$, stated to be in Scaliger's own hand. But this I suppose to be merely a transcript of Susius' notes ; and it does not appear that Scaliger himself saw $G$. At any rate, he had not seen it in 1598 . For he writes to Lipsius in that year: 'Exemplar quidem ipsum non uidi' (Burmann, Syll., i, p. 242, no. 233). G was employed by Sherburne: a note in it records that it was sent for his use to a London bookseller named Carr. Bentley for some time had the MS. in his possession. ${ }^{1}$ An accident made Jacob dependent for his knowledge of it on Susius and Bentley. ${ }^{2}$ In 1888 P. Thomas supplied the deficiencies of previous collators. More recently Bechert and Breiter (twice) have recollated $G$ for their editions; and yet again Thielscher ${ }^{3}$ has been through the MS. and confesses that he can add nothing of value to the collations of previous workers. Lastly, in 1907, my friend Mr. C. T. H. Walker, of Corpus, recollated G, and has been kind enough to put his notes at my disposal. They bear out the testimony of Thielscher to the thoroughness with which $G$ has been examined.
$L$, which belongs to the University Library of Leipsic (1465), ${ }^{4}$ is of an antiquity hardly, if at all, inferior to that of $G$. Two young German scholars-Feller (in 1693) and Richter (in 1709)collated it for Bentley ${ }^{5}$ (who was the first editor to employ it). $L$ had also been collated about 1692 by a son of Graevius. ${ }^{6}$ Jacob made a complete transcript of the MS., and his Apparatus records most of its variants. It was recollated by Bechert and

[^3]
## INTRODUCTION I

by Breiter ; and Thielscher ${ }^{1}$ has recently examined it afresh throughout. I am indebted to the last named for the loan of his collation of Book II. Upon this collation my Apparatus Criticus depends.
$M$, once in the Escurial Monastery, now in the National Library at Madrid (31), belongs to the beginning of the fifteenth century. Its readings were first made known, and appraised, by R. Ellis. ${ }^{2}$ But fourteen years before Ellis published his collation $M$ had been discovered and collated by Loewe. Loewe's collation, however, did not see the light till 1907, when, together with Ellis', it was used by Breiter for his edition. Between Ellis and Loewe there were, as was inevitable, a certain number of discrepancies. ${ }^{3}$ In 1908 I asked Mr. C. E. Stuart, of Trinity College, Cambridge, to examine $M$ for me in those places where Ellis and Loewe differed. This he was kind enough to do, and to put at my disposal his notes of the result. ${ }^{4} \quad M$ has, however, been collated afresh by Thielscher and K. Ziegler, ${ }^{1}$ and it is to be hoped that they will publish any new results of their examination of it. ${ }^{5}$ Meanwhile Thielscher has for Book II generously supplied me with notes upon the readings of those passages where Ellis, Loewe, and Stuart left me still doubtful.
$G L M$, all three, go back ultimately to a common ancestor $(A)$, of which I shall presently speak in detail. At present it is sufficient to say that editors are agreed that this MS., $A$, contained 44 lines to the folium ( 22 lines to the page). But $G L$ are descended from $A$ through an ancestor which they do not share with $M$. This ancestor I will call $a$. $a$ was a MS. of saec. ix-xi, containing 38 lines to the page, written in double columns. Clear traces of this lineation are preserved in Books III and IV. III. 37 is followed in $G L$ by III. 7. This means that III. 7 was omitted from its proper place and inserted as the last line of a page of 38 lines ( 37 + titulus). Again, IV. $73^{1-2}$ are omitted by $G L$, ${ }^{6}$

[^4]
## THE THREE PRINCIPAL MSS.

and they are separated by eleven pages of 38 lines from IV. 313 ; and at IV. 313 there has occurred a very notable and extensive transposition. In GL IV. 10-313 has become transposed with III. 400-IV. 9. Now IV. 10-313 gives us 304 lines, that is exactly six pages of 38 lines each. These six pages have been transposed across III. $400-$ IV. 9, a space of 292 lines. Instead of these 292 lines we should expect 304 lines; but the deficiency is to be explained by the fact that III. 400-IV, 9 contain the transition from Book III to Book IV: we may reasonably allow twelve lines for subscriptio, titulus, and the capitula ${ }^{1}$ to Book IV, What happened in $a$ then is quite plain. A whole ternio (of $3^{8}$ lines to the page) was completely inverted in the process of binding.

These facts about the MS. from which $G L$ are descended I called attention to casually in a footnote in the $C$. $Q$., ii. 2, p. 126. I imagined that they must have been observed by any one who had ever studied an Apparatus to Manilius. But I had not then read Bechert's paper in Leipziger Studien; 1878. Judge my surprise when I found that he tried to explain the phenomena which I have noticed in $G L$ by the hypothesis of an archetype of 44 lines to the folium - the archetype of GL and M. Thielscher in Philologus, 1907, repeats in the main the arguments of Bechert. Yet, apart from all arithmetical difficulties, it is unlikely that so late a MS. as $M$ would have escaped a confusion in the archetype which has affected so strangely two eleventh-century MSS. But the arithmetical difficulties are really insuperable. To get away from them Thielscher is reduced to assuming that $A$ contained anything between $44-50$ lines to the folium. But the very complicated transpositions in Book I make it quite clear that the number 44 was rigid ; and I hope to be able from the later books to adduce many indications of this.

The foundation for a systematic study of the archetype of the Manilian MSS. was laid by Jacob, who, with one of those flashes of insight which often illumined his sombre intelligence, first perceived the explanation of those remarkable transpositions in Book I which Scaliger had with such facility and certainty corrected. He devotes to the problem only a long footnote in his pamphlet De Manilio Poeta ${ }^{2}$; but although some of his calcula-
${ }^{1}$ Just as in $L$ the capitula to II are added at the end of I.
${ }^{2}$ Lübeck, 1832, pp. 18-21.

## INTRODUCTION I

tions are defective, ${ }^{1}$ his main contention-that $A$ contained 22 lines to the page-is assured. Bechert, ${ }^{2}$ Housman, ${ }^{3}$ and Thielscher ${ }^{4}$ have, since Jacob, all contributed something to the solution of difficulties. In what follows I hope, availing myself of the work of all of them, to carry the study of the archetype a few steps further.

In Book I, 355-98 have become, in all our MSS., transposed with 399-442; and again, 530-65 with 566-6ır. Now 355-98 and 399-442 each consist of 44 lines, and they are separated from 530 by 88 lines (strictly 87 lines; but a line has probably been lost ${ }^{5}$ after 463). 530-65, again, may be regarded as the wreckage of 44 lines; for $564-5$ are pretty certainly spurious, and there is an undoubted lacuna after 563 . Finally, $566-6 \mathrm{Ir}$ are reduced to 44 lines by the consideration that $566-8$ are interpolated.

That these figures point to the fact that each of the pages in $A$ contained 22 lines ( 44 lines to the folium) is agreed by everybody. ${ }^{6}$ But neither Jacob nor Bechert nor Thielscher has, I think, made it clear how the confusion of the folia of $A$ which caused these transpositions in Book I was brought about. We have to deal with two distinct transpositions, each involving 88 lines, and separated from one another by 88 undisturbed lines. Can we divine any single cause (some one mechanical error) which would explain at one and the same time both transpositions? I think that we can. Lines $355^{-611}$ occupied in $A$ I2 pages $=6$ folia 3 sheets. If of these three sheets the second had by an error in the binding been placed before the first, this single blunder would produce both the transpositions in question. The reader can test this at once for himself by laying three sheets of paper upon one

[^5]
## THE THREE PRINCIPAL MSS.

another and doubling them. He will then have twelve pages; and if, beginning at 355 , he allows 22 lines to each page, he will find that by placing the middle sheet first he will get exactly the order of lines offered by all our MSS.

We are now in a position to visualize the first twenty-two folios ( = Book I) of our archetype as it was when it lay before the copyists who transmitted its faults to GLM.

| Fol. |  | Recto. | Verso. |
| :---: | :---: | :---: | :---: |
| 1 |  | 1-22 | 23-46 ${ }^{1}$ |
| 2 |  | 47-68 ${ }^{2}$ | 69-90 |
| 3 |  | $9{ }^{\text {1-112 }}$ | 113-134 |
| 4 |  | 135-156 | 157-178 |
| 5 |  | 179-200 | 201-222 |
| 6 |  | 223-244 | 245-266 |
| 7 |  | 267-288 | 289-310 |
| 8 |  | 311-332 | 333-354 |
| 9 |  | 399-420 | 421-442 ${ }^{\text {3 }}$ |
| 10 |  | 355-376 | 377-398 |
| 11 |  | 443-463 ${ }^{4}$ | 464-485 |
| 12 |  | 486-507 | 508-529 |
| 13 | [566-7] | 568-589 | 590-6II |
| 14 |  | 530-551 | $552-563+[564-5]$ |
| 15 |  | 612-633 | 634-655 |
| 16 |  | 656-677 | 678-699 |
| 17 |  | 700-721 | $722-743^{5}$ |
| 18 |  | 744-765 [766] ${ }^{6}$ | 767-788 |
| 19 |  | 789-810 [811-I2] ${ }^{7}$ | 813-834 |
| 20 |  | 835-856 | 857-878 |
| 21 |  | 879-900 | 901-922 |
| 22 |  | 923-926 |  |

In the above table the figures in black type are either those from which the pagination and lineation of $A$ are deduced (as at foll. $9^{-10}, 13-14$, where the figures have already been explained), or those where the pagination throws light on doubtful questions in the text. Thus ( I ) fol. I verso contains $23-46$ for the reason that $3^{8-9}$ are interpolations of Bonincontrius. (2) After 68, the last line of 2 r , I think it probable that a line has been lostsomething after this sort,
necdum homines, cum mens formidine pressa iaceret,
which will enable us to interpret 72. (3) In the C. Q., 1908, p. 130, I made the suggestion that 433 ought to be transposed so as to xxi

## INTRODUCTION I

follow 442. This was before I had elaborated the pagination of $A$. It now appears, since 442 was the last line of 9 v , how easily 433 may have been first omitted and then inserted in the wrong place. In its present place it involves an astronomical absurdity. (4) The insertion of 463 a at the end of ir r is due to Housman. (5) 743 was the last line of 17 v in $A$; but its proper place, as Postgate perceived, and as every one now agrees, is after 739. It dropped out after 739 and was added at the end of the page. When Postgate suggested this transposition, he was, I believe, not aware of the manner in which it accorded with the lineation of $A$. (6) After 765 there follows in all our MSS. a line which is really nothing else than a corrupt version of II. 3. It was no doubt written at the end of 18 r as what we should call a cross-reference: it was a citation of a parallel which has got carried into the text. (7) There can be no doubt that 8 II-12 are spurious. Bentley ejected the whole of $809-12$. But Jacob points out that some mention here of the planets is essential ; and we are thus obliged to retain $809-10$. But $8 \mathrm{ri}-12$ are not thus essential, and are on the face of them scholastic : cf. V. 6-7. They no doubt stood in the lower $\operatorname{margin}^{1}$ of 19 r .

When we pass to Book II, with which I am here more directly concerned, the problem of reconstituting our archetype is not so simple. There are not in this book, as there are in Book I, transpositions of whole folia which enable us to say with certainty that this or that line was the last of a leaf or page. However, we do carry over from Book I the knowledge that each of the pages in Book II will contain 22 lines. Look now at lines $120,208,23^{1-2}$, 343-4. These are all versus irrepticii : indeed, 343-4 are merely $3^{18-19}$ repeated. Consider now the intervals which separate them. $-\mathbf{1 2 0}-208=88$ lines; between 208 and 23 I lie 22 lines; and again between 232 and 343-4 lie $110(22 \times 5)$ lines. In other words, if $119,207,230,342$ had each been the last line of a page in $A$, then 120 was the first line of a page, and 208, $231-2$ must have stood in the lower margin of the page, outside the body of the text ; while 343-4 stood, like $\mathbf{1} 20$, in the body of the text

[^6]
## THE THREE PRINCIPAL MSS.

of $A .{ }^{1}$ For from 343-408 gives us 66 lines (three pages), and 409 is a versus irrepticius. Omitting 409 as interpolated, our next page will be $410-31$; and 432 is also spurious. From this point our clues are fewer and more difficult to seize. 432-562 gives us six pages less one line; ${ }^{2}$ and I hope to show conclusively in my Commentary that a line has been lost after 562 . The next page in $A$ will be $563-84$, and probably both 585 and 586 should be rejected (586 has long been a suspected line). From 585-650 is a distance of three pages less one line, ${ }^{3}$ but 65 r is the most obvious and universally recognized interpolation ; so that, despite the deficiency of a line, I suspect that 650 ended a page. And this suspicion seems confirmed by the following considerations. (1) $65^{2-72}$ give us with 659 a (see Commentary) a page, and after 672 we have the beginning of a series of small transpositions, for the detail of which see Commentary ; (2) from 652-738 we traverse a space of-four pages, and in my Commentary I shall try to show how the removal of 739 at once gives sense to the two lines which it separates; (3) from 740-914 yields, with 739, eight pages, and 915 is spurious ; (4) 936 is an interpolation, and $9^{15}-3^{6}=$ one page.

This arithmetical spacing of faults in our text can scarcely be accidental. It means that we are on the track of $A$. Our guides are not so certain as they were in Book I. But even so it seems possible to conjecture the pagination and lineation of $A$ with a fair degree of probability, and with fruitful results to the criticism of our text. If 110, 208, 231,342 were each the last line of a page, then the first page of Book II must have contained only r-9. Now we saw that in $A$ fol. 22 v contained I. 923-6. There no doubt followed a subscriptio (one line) and the capitula (which appear in both $L$ and $M$ ). We cannot say how many lines these fourteen capitula occupied in $A$, but if we allow for these seven lines, then fol. 22 V will consist of the required number of 22 lines (I. 923-6, subscriptio, seven lines of capitula, II. 1-9).

[^7]
## INTRODUCTION I

The following table, therefore, represents more or less adequately the pagination of $A$ for Book II.

| Fol. | Recto. | Verso. |
| :---: | :---: | :---: |
| 22 | I. 923-926, cap. \&c. II. 1 -9 | 10-31 |
| 23 | 32-53 | 54-75 |
| 24 | 76-97 | 98-119 |
| 25 | 120-141 | 142-163 |
| 26 | 164-185 | 186-207 [208] |
| 27 | 209-230 [231-232] | 233-254 |
| 28 | 255-276 | 277-298 |
| 29 | 299-320 | 321-342 |
| 30 | 343-344-364 | 365-386 |
| 31 | 387-408 [.409] | 410-431 |
| 32 | 432-453 | 454-475 |
| 33 | 476-497 | 498-519 |
| 34 | 520-541 | 542-562a |
| 35 | 563-584 [585 | -586] 587-60 |
| 36 | 607-628 | 629-650 [651] |
| 37 | 652-672 | 673-694 |
| 38 | 695-716 | 717-738 |
| 39 | $740-761$ | 762-783 |
| 40 | 784-805 | 806-826+739 |
| 4 I | 827-848 | 849-870 |
| 42 | $87 \mathrm{I}-892$ | 893-914 |
| 43 | 915-936 | 937-958 |
| 44 | 959-970 |  |

It is beside my purpose, in a volume which is intended to illustrate principally Book II, to attempt to arrange the three remaining books of the Astronomica according to their pages in $A$. In Book V, indeed, there are, so far as I can divine, no data for doing so beyond a strong probability that a folium has been lost after 710 . But certain circumstances connected with the pagination of Books III and IV are important as shedding light on the character and origin of $M$. These I will call attention to briefly. In GLM III. 14 is placed after III. 21. This can only mean that it was omitted from its proper place and inserted as the last line of a page of 22 lines ( 21 lines + titulus, fol. 44 verso). Any one who cares to make the calculation will find that fol. 47 recto must therefore have ended with III. r53. Fol. 47 verso contained ${ }^{154-74}$ (the space of one line being occupied by the lemma after 159 which is written as a verse in $M$, and represented by a blank xxiv

## THE THREE PRINCIPAL MSS.

space of one line in $L$ ). Now in $M_{153}$ is followed not by ${ }_{154-5}$ -the first lines of 47 v , but by ${ }^{175-6}$, the first lines of the page following. It is difficult to escape the suspicion that the scribe of $M$ was actually transcribing $A$. That I have reckoned the pages in this book correctly is made additionally probable by the fact that (omitting the spurious line 317 -which perhaps stood in the margin of $A$ ) 549 will be the last line of a page ( 56 v ) ; and after 549 there is a generally recognized lacuna. ${ }^{1}$

Book III probably ended at fol. 59 v , that page thus containing 24 lines to avoid carrying over the last two lines of the book to a new folium. The first page of IV ( 59 v ) will then, like the first page of III, have contained a titulus and lines $1-21$. This is probable in itself, and seems to be guaranteed by the fact that 396 would thus be the last line of a page ( 68 v ) ; and in $G L M$ we find 388 transposed to follow 396. (I have not reckoned the spurious line 298.) Look now at IV. r32. It was the first line of a page in $A$. Its edges would be liable to damage; and we find that $M$ omits altogether the last word of the line, uestes. $G L$ have kept uestes ; but $A$, when it lay before the scribe of $M$, was some five hundred years older than when it was copied by the first ancestor of GL. Once again, IV. 198 was the last line of fol. 64 v in $A$; and $M$ omits it.

These facts taken in conjunction seem to me sufficient to make probable the inference that $M$ was copied direct from $A$. And this inference may, I fancy, be supported by a piece of evidence which lies outside Manilius. In $M$, as is well known, Manilius is bound up with the Siluae of Statius. Krohn long ago put forward the opinion, accepted by both Vollmer and Klotz, that $M$ in the Siluae is copied from an original which contained 44 lines to the page. It was this consideration which led me at one time, as I have said, to entertain the view that the archetype of Manilius contained 44 , and not 22 lines to the page. But I now think that the facts which Krohn adduces are equally well, or even better, explained by the hypothesis that $M$ in the Siluae derives, like our $G L M$, from a MS. containing 22 lines to each page. ${ }^{2}$

[^8]
## INTRODUCTION I

And if this hypothesis is correct, what more likely than that Manilius and the Siluae, which are found together in $M$, stood together in the codex found by Poggio in Constance?

There would seem then to be external grounds for believing that $M$ stands far nearer to the archetype than GL. Does the internal evidence, the evidence of its readings, confirm it in that superiority to which this external circumstance might naturally entitle it?

Poggio ${ }^{2}$ speaks of the scribe of $M$ as 'ignorantissimus omnium viventium '-a phrase for which we can guess the English equivalent. Poggio was perhaps a somewhat exacting and fastidious employer. ${ }^{2}$ Yet the scribe of $M$ was undoubtedly a person of very inadequate scholarship. On the other hand he was painstaking and unambitious, and utterly honest. And it is because of this utter honesty of its scribe that $M$ is, on the whole, a far more faithful representative of $A$ than either $G$ or $L$. Not only has it, in innumerable places, preserved the true reading where $G L$ have a false reading; but-more important-in innumerable places where $G L$ have a specious and passable reading, $M$ has something which, if it is corrupt and absurd in itself, yet points us to the true text. Its strength is made perfect in weakness. Out of its foolishness criticism has ordained wisdom.

This is what Mr. Housman means when he says that the family of $M$ is 'less correct', that of GL 'less sincere'. Why having said this he yet says, 'Let us hear no talk of the better family of MSS., for nothing of that name exists', I do not know. It may be that he hates some unnamed critic more than he loves consistency. For the 'more sincere' family is and must be for any critic who understands his business 'the better family'. One can, of course, go too far : one can make of $M$ a veritable spoilt child ; and indeed there would be some excuse-so irritatingly respectable is $G$ in comparison. But when all is said and done, while any moderately competent person can construct out of $G L$
or badly frayed, in such a way that the first leaf showed through its lacunae the readings, at a particular point, of the leaf following. In the case of v. I. 8r this explanation will, I think, be admitted to work much better than that of Krohn (which fails to satisfy Klotz). See Klotz, Praef., p. lxxv, 1900. It should be noticed, in support of it, that the damage at v. I. 8 r has, as Klotz remarks, extended to v. I. 82-4.
${ }^{1}$ C. R., xiii, 1899, p. 119. See below, Introduction, pp. xxxvi-xxxvii,
${ }^{2}$ See Letters, ed. Tonelli, i, pp. 155, 160, 176.

## THE THREE PRINCIPAL MSS.

a text that will construe, $M$ is a MS. for a scholar.' 'Divinare oportet, non legere', says Poggio of the MS. which he sends to Francesco Barbaro; and the joy of $M$ is the necessity of exercising divinatio upon it. And this joy is a holy one just for the reason that $M$ is 'sincere '. Its scribe is dealing straight with us, and he deserves in return a proportionate consideration, $M$ is worth emending because it has not been emended already-or has only very rarely been emended. Such emendations as are to be found in it are probably not due to the scribe who copied it. That sincere but unscholarly man-who writes nasantia for nascentia (I. 156), crauit et for Iuppiter (I. 431), lumilia for lumina (I. 62 I ), and the rest of it-was not capable of such a brilliant conjecture as Orphei de for Orphiucus at I. 33I. Mr. Housman says that throughout $M$ he has noticed only three downright interpolations; of which I. 33 I is one ; another is uiam (for procul) I. 851 -where I fancy that procul and uiam are both false, but that uiam points us to the truth; the third is IV. 776 possidet for condidit, where the whole line is spurious. If Mr. Housman had studied $M$ a little more carefully he would have added to his list. For example, not to go beyond the very book which he has edited with such skill and aplomb, at $\mathbf{1} 28$ unde est is clearly interpolated; at 309 nitentia has been altered in $M$ to lucentia (as though nittentia); at 323 effulgent has been changed to fulgent, rhythmi gratia; at 348 for rapido $M$ has diuo, an obvious emendation of : radipo; at 435 similem morsum is one of the clumsiest and most manifest emendations ever made; at 723, where GL have mundum faithfully (for nondum, to which Ellis brilliantly and certainly corrected it), $M$ has mundus. All these places afford examples of rather bad tampering with the text. But they are not due, as I think, to the scribe of $M .^{1}$

Let me now first call attention to a few places where $M$ has been faithful in small things, and has the reward of such fidelity.
I. 422-3. tum di quoque magnos
quaesiuere deos, Rationem Iuppiter ipse.
deos, esurtionem $M$, which I have emended as above (urtionem $=$ rutionem $=$ rationem ) deos, dubitauit $G L$.
dubitauit is probably a mere gloss upon rationem quaesiuit.

[^9]
## INTRODUCTION I

1. 285. nec uero e solido stat robore corporis instar. instar scripsi: in $M$ : et cett. (star was taken as stat and omitted owing to the previous stat.)
I. 582. proximus, hunc ultra, brumalis nomine limes. timens $M$ : corrected independently, and with certainty, by both Ellis and Breiter : tingens $L$ : tangens $G$.
II. 474. At triquetris orti pugnant fugiuntque uicissim. utrique trisorti $M$ : utrique sorti $G$ and $L$.
II. 849-50. quae pars occasu contermina quaeque sub orbem descendit.
occasus interminumque $M$ : occasus inter imumque $G$ and $L$.
III. 663. pinguiaque impressis spumant uineta racemis. uineta scripsi: inuicta $M$ : musta $G L$ : despumant codd. (edd. mostly read musta with despumat.) ${ }^{1}$
IV. 413-14.
qua largior umor, quaque umor uitauit 〈iter〉.

414 ita scripsi: quaque minor ibi touit $M$ : quaque minoribus (ouit suprascr.) $L$ : quaque minor /// $G$.
IV. 431-4. sed quis tot numeros totiens sub lege referre, tot partes iterare queat, tot dicere summas, per patrias musas? faciem mutare loquendi, intulimus si uerba, piget.
433 patrias scripsi: patris $M L^{1}$ : partis $G L^{2}$ (causas pro musas codd. ut Ven. ii. 54). 434 intulimus scripsi : incidimus codd.
IV.844. nec trahit adscitum quo fulget Delia lumen.
adscitum scripsi: ad cetum $M\left(L^{2}\right):$ ad cecum $G L$.
IV. 864. antiquasque negat uires nec munera tanta nec similis reddit noxas.
antiquasque scripsi: animasque $M$ (=antinasque) : amissasque $G L$.

All edd. read amissasque, which would mean 'deny that they have lost their strength', which would be nonsense.
V. 43. (fortunam) attonitumque ${ }^{2}$ uolet transnare profundum.

[^10]
## THE THREE PRINCIPAL MSS.

nitumque $M$, quod sic correxi : totumque $G L$. ( $A$ had tōitum no doubt.)

All these examples are from places where $M$ furnishes us either with a uox nihili, or with a word, Latin indeed, but in the context, meaningless. Yet in each case the reading is more 'sincere' than that of the other MSS., and the further removed it is from correctness the nearer is it to truth. But the superiority of $M$ to all other MSS. does not lie merely in its blunders. In innumerable places it is right, or nearly right, against all the MSS. Let any one turn to Mr. Housman's tables of excellences (pp. xxivxxvi). Let him remember that where, on p. xxiv, Mr. Housman says $\beta$, we may now safely say $M$ : for all $\beta$ is $M$. He will then find that the passages where $M(=M \beta)$ excels $G$ fill a much longer column than do the passages where the converse occurs. But Mr. Housman's lists do not pretend to any completeness, and they are also designed to show that $G$ and $M$ are equal. Let me therefore put before the reader a list of places where $M$ is right-or nearly so-which shall be, so far as it goes, rather more complete. I say 'so far as it goes'; for I shall confine myself to a single book. I select Book III merely for the reason that it follows Book II. A list from any other book would yield similar results ; and any one can make these lists for himself. Here, then, are some places in Book III where I think the reading of $M$ truer than that of $G L$.

22 magni $M$ : magno $G L .23$ sint acta $M$ : sit acta $L$ : si facta $G .^{1} \quad{ }_{52}$ flammamque $M$ : flammam $G L . \quad 89$ utcunque $M$ : ut fit cum $G$ : ut cum $L$. 132 gnatorum] gratorum $M$ : fatorum $G L . \quad 177$ duplici $M$ : duplicem $G L . \quad 200$ fulgens $M$ : om. $G L$. 265 ibi $M$ : ubi $G L$. 27 I demum $M$ : demum est $G L .283$ gelidas uergentia] gelida uergentia $M$ : gelidasque rigentia $G L$. 292 cadendi $M$ : canendi $G L .297$ signa $M$ : signis $G L$. 325 fastigia $M$ : uestigia $G L$. 328 condesque] scandesque $M$ : scandensque $G L$. 332 limite recto] limiter octo $M$ : limitet octo $L$ : limitis octo $G$. 337 iam $M: \operatorname{nam} L: \operatorname{nec} G .345$ oculos $M$ : oculis $G L .359$ prona $M$ : prìma $L^{1} G^{1} .362$ patebunt $M$ :

[^11]xxix

## INTRODUCTION I

patebit $G L . \quad 382$ redit $M$ : regit $G L . \quad 395$ parti terrarum] para ( $=$ in Lombardic, part) terrarum $M$ : parte terrarum $G$ : parat iter rarum, $L$. . 407 uincant] uincat $M$ : uinciat $G L . ~ 419$ tercentum $M$ : trecentum $G L^{2}$ : trecentis $L$, 420 quota demitur] quod ademitur $M$ : quota demit /// $L$ : quota demit $G$. ${ }_{430}$ tradetur geminis] traditur gem. $M$ : traditur et gem. $G L .=43^{1}$ procedent $M$ : procedunt $G L$. 432 munere] munero $M$ : numero $L$ : munera $G$. 487 multiplicans $M$ : multiplica $G$ : multiplicatis $L .490$ coniungere] coniunges $M L^{1}$ : coniungis $G$. 515 mundum $M$ : mundi $G L$. $5_{16}$ alii] aliis $M$ : illis $G L$. 530 annis anni $M$ : annus annis $G L$ (?). 535 animantum] aminantur $M$ : minantur $G L .543$ socia $M$ : spatia $G L .575$ centauri $M L^{2}$ : contauri $L^{1}$ : cūtauri $G .577$ ad positi $M$ : appositis $G L$ (?). 595 quadragenos $M$ : quadragenis $G L, 604$ forma uenit] forma et $M$ : formå et $L$ : forma est et $G$. 607 brumas $M$ : bruma $G L$. 609 dena $M L^{2}$ : dona $G L . \quad 629$ tum $M$ : cum $L$ : tunc $G$. 633 arua ] aura $M$ : auras $G L$. 635 status $M L^{2}$ : situs $G L$. 641 riget] figit $M$ : fugit $G L .649$ a sidere $M$ : ad sidera $G L$. 659 pari cum] paritur $M$ : partitur $G L .663$ uineta] inuicta $M$ : musta $G L .665$ ducit $M$ : duct $G$ : ducant $L$, 618 nec quicquam] nequiquam $M$ : ne cuiquam $G$ : necuiquiquam $L . \quad 678$ nouet] mouent $M L^{2}$ : mouens $G L^{1}$. 680 quidam $M$ : quidem $L$ : equidem $G$.

I have not included in this list places where $M$ with $G$, against $L$, or $M$ with $L$, against $G$, is right. But the list suffices to show our dependence at every turn on M. No other MS. nearly so often triumphs over its rivals. -You can make a fair list in this same book of passages where $G$ and $L$ or $G L$ are right where $M$ is wrong (it will be, however, a less lengthy list); but $G$ and $L$ very rarely indeed triumph over $M$. 'They are right and $M$ is wrong, but the difference is nothing. They have obliquus: $M$ has oblituus =oblicuus : what does it matter? $M$ :again is full of wrong separations of words; but the words are there. Those victories of $G L$ over $M$ which are really numerous are petty. But the defeats which $M$ inflicts on $G L$ are again and again crushing.

None the less, I am as little disposed as is Mr. Housman to think that we can dispense with either $G$ or $L$-least of all with $G$. For three hundred years the authority of $G$ has been paramount with editors of Manilius. The discovery of $M$ has very considerably

## THE THREE PRINCIPAL MSS.

weakened, but it ought not to be allowed to destroy wholly this authority. Bechert, who had both $G$ and $M$ before him, very greatly overrated the comparative worth of the older MS. He is throughout blind to the patent weaknesses of $G$, and to all the virtues, whether patent or latent, of M. Mr. Housman, on the other hand, ever ready to find good in all MSS. and evil in all editors, will not allow that either MS. is one whit superior to the other. He stands judicially between two bundles of hay, and pronounces them both equally palatable (the figure is his own). ${ }^{1}$ $M$ is as good as $G$ and $G$ as $M$. Very similar is the position of Breiter. But a violent reaction against $G$ was bound to come before long. And recently a German scholar, P. Thielscher, ${ }^{2}$ has put forward the opinion that $G$ has no independent value whatever. He wishes to banish its readings for ever from any Apparatus to Manilius. He regards it as nothing more than an interpolated copy of $L$. Though I notice with surprise that Thielscher seems already to have converted Kraemer, ${ }^{3}$ I do not fancy that his attack upon $G$ will be regarded as successful by the majority of Manilian students. One important merit may be conceded to Thielscher. He has done good service in emphasizing the strength and sincerity of $L$. But his onslaught upon $G$ is, I think, miscalculated.

Mr. Housman, on p. xxv of his edition of Book I, has compiled a list of passages where the reading of $G$ is clearly superior to that of the other MSS. This list might be longer than it is ; but I will content myself by selecting a few examples from it :-
II. 15 Iouis et $G$ : iuuisse $L M$. is notauit $G$ : rogauit $L M$. 168 exterius mirantur $G L^{2}$ : exterminantur $L M .473$ generant $G$ : gerant $L M$. 584 lis $G^{2} L^{2}$ : leuis $G L M$. III. 69 sorte $G$ : sortem $L M$. IV. 30 captis $G$ : capitis $L M$. 22 I Multo $G L^{2}$ : multum $L M$. 243 Vesta tuos $G L^{2}$ : uastat uos $L$ : restat uos $M$. 282 illuc agilem $G$ : huc caliginem $L M$ (caligine $M$ ). V. 46 ortus $G$ : portus $L$ : portur $M$.

In all these places $G$, sometimes supported by the corrector of $L,{ }^{4}$ has the true reading where $L M$ have a false reading. Now where $L M$ agree in error, especially in senseless and unmetrical

[^12]
## INTRODUCTION I

error, as e.g. IV. 282 huc caliginem, this agreement can only be explained by supposing that their reading is that of the archetype of all our MSS., $A$. Whence then has $G$ acquired in all these places-and I could multiply the number of them infinitely-the true reading? In some cases no doubt its true reading may be due to conjecture-for it is, as Thielscher perceives, a deeply interpolated MS. But in many cases it is impossible to explain these true readings as conjectures. And the only other explanation is that where $G$ alone has the true reading it has somehow or other gone behind $A$, behind the archetype of GLM. When at IV. 282 $L M$ have huc caligine ( $m$ ), the reading of $A$ was undoubtedly huc caligine $\bar{e}$; and huc caligine must also have been the reading of the common parent ( $\alpha$ ) of $G L$. The many places where $G$ diverges from $A$ and $a$, therefore, and offers instead a true reading, can only be explained by assuming that $G$, or the MS. from which it is immediately copied, has been corrected from some purer and probably older source than $A$. And that this has happened is most clearly seen when we observe that in many of its true readings $G$ is supported by $L^{2}$ (as II. 584 , IV. 22 I in the readings given above). $G$ and $L$, the former in countless places, the latter in a few, have been corrected from a MS. of Manilius better than any known to us. ${ }^{1}$

[^13]
## THE THREE PRINCIPAL MSS.

And now we can see at once both how much and how little justice there is in Thielscher's onslaught upon $G$. $G$, in so far as it is a descendant of $a$, is, as Thielscher accounts it, a good deal inferior to $L$. $L$ is the sincerer, less interpolated, representative of $\alpha . G$ is in itself an inferior $L$; but it is an inferior $L$ which has been worked through (or its parent had, more probably) by a fool with a better MS. of Manilius than the world will ever see again-till Herculaneum gives up its dead. I say a 'fool' worked through $G$ with such a MS.; for the sparsity of the corrections which he has introduced from it argues an extreme tenuity of intelligence. Yet we owe this fool, even so, a deep debt. If it is levity to say with Housman that $G$ and $M$ are 'equal', it is equal levity to say with Thielscher that $G$ is a MS. which may be altogether set aside. This much, however, we may say: $G$ 's blunders deserve no attention. $M$ 's blunders are infinitely important. Its strangest corruptions are again and again nearer the truth than the specious correctness of the other MSS. But $G$ where it is wrong is useless. When its readings give sense we have, if they differ materially from those of $M$, to consider whether their appearance of correctness is the result of interpolation or of 'correction' in the true sense. But the examples of true correction from a pure and ancient source are so many that $G$ remains an indispensable guide in the construction of any sane text. I may sum up the relative merits of $G$ and $M$ by saying that they are two MSS., of which the one, $M$, is good all through and bad all through, the other, $G$, is bad all through but good in places.
$G L^{1} M^{1}$ : fixuram $M^{2} .756$ contexit $L^{2} M$ : *conuexit $G L^{1}$. 776 *que $L^{2}$ : qui $G L^{1} M . \quad 802{ }^{*}$ candet $L^{2}$ : candit $G L^{1} M . \quad 836{ }^{*}$ capillos $L^{2} M$ : capillis $L^{1}$ : capillus $G$. 843 utero $L^{2}$ : *uteros $G L^{1} M$. $844{ }^{*}$ paruos $L^{2} M$ : paruis $G L^{1} .863^{*}$ cum $L^{2} M$ : ne $G L^{1} . \quad 882$ labentesq. $L^{2}$ : ${ }^{*}$ labentisque $G L^{1} M$. 884 erictonios $L^{2}$ : erectecos $L^{1} M$ : ericteos $G$.

I will not pursue examples of the same phenomenon through the other books. Nor must I be supposed to think that these or other examples prove that $G$ is not derived from $L$. They prove nothing, but, in conjunction with other facts, they materially weaken the presumption of $G$ 's dependence upon $L$ (which is, after all, a mere presumption). It is particularly difficult to conceive how $G$, which, according to Thielscher, contains so many true readings reached by conjecture, should so often reject the true readings offered to it by the corrector of its original. Nor can I explain, upon Thielscher's hypothesis, the number of places where GM agree against $L$ : e.g. in III. 1-400 alone, at $3,45,70,73,213,236,265,295,333,360,367,377,387$.

## APPENDIX I

## Note on the Madrid MS.

The object of this Note is twofold. I desire firstly to notice a difficulty-to which proper attention has not, I think, been called-in connexion with the received dogma of the Poggian origin of $M$. Secondly, I wish to give prominence to a recent and important discovery made by P . Thielscher in his examination of $M$.
$M$ (or $M_{3 I}$, to give it its full title) has to be considered in connexion with another MS. in the Madrid National Library, $X 8 I . M 3 I$ contains the Siluae of Statius and the Astronomica of Manilius. $X 8 I$ contains Valerius Flaccus, Asconius, and Sigebert's Chronicon. I will call $M_{3 I}$ by its usual designation $M$. I will call $X 81$, so far as it contains Valerius and Asconius, $P$ following Clark in his edition of Asconius. That portion of it which contains the Chronicon I will call $\pi$.

Clark regards $P$ as a transcript made by Poggio himself of the MS. (or MSS.) of Valerius and Asconius which he unearthed at St. Gall in 14 r 6 ( $E p p$., Tonelli, pp. 25-9). $\pi$, again, he holds to be Poggio's copy, in his own hand, of a MS. of the Chronicon which he found some years later in Britain. $M$, lastly, is, according to Clark, a copy made for Poggio by a German scribe at Constance of the MS. (or MSS.) of Statius' Siluae and Manilius discovered in, or near, Constance about the same time as Valerius and Asconius. It is, in fact, the very copy spoken of by Poggio in his now well-known letter to Francesco Barbaro. ${ }^{1}$

It is supposed that $M$ and $P$ once formed a single MS. Both have the same binding; both bear the name of the same owner, 'Del Sor Conde de Miranda'; and the titulus to $M$ runs thus: 'Manilii Astronomica-Statii Papinii Siluae-Asconii Pediani in Ciceronem-Valerii Flacci nonnulla.' Through the last seven words a line has been drawn (when the two MSS. were separated ?). The titulus, it will be noticed, says not a word of Sigebert's Chronicon. Clark's view is that $M$ and $P$ were put together in one volume while Poggio was in Germany or England: that Poggio brought $\pi$ back with him from England, and, disjoining the previously united $M$ and $P$, added $\pi$ to $P$.

Now this view is, I think, open at certain points to some rather serious objections. Of these the most powerful is that the titulus to $M$ is written in a hand which cannot be earlier than the end of the sixteenth century. Why no one has called attention to this I do not know. ${ }^{2}$ Klotz (Siluae, p. ix) calls the hand recentior

[^14]
## NOTE ON THE MADRID MS.

vaguely, and says, what did not need saying, that the titulus must have been written after $M$ had lost its first folio ( $M$ begins at Manilius, I. 83). Wishing to be rather more accurately informed, I showed to Mr. Madan, of the Bodleian Library, a photograph of the page of $M$ containing the titulus. ${ }^{1}$ Mr. Madan, with his wide palaeographical knowledge, was able to say confidently that the titulus was written in the late sixteenth, or early seventeenth, century. It follows that $\pi$ cannot have been added to $P$ before that date.

On the other hand, $P$ and $\pi$ can hardly have been conjoined after the sixteenth century; for it is reasonable to suppose that their conjunction followed upon the separation of $P$ from $M$; and the bindings of $P$ and $M$ belong to the sixteenth century. This piece of knowledge I owe to the courtesy of the Sub-Librarian of the Madrid National Library, who very kindly settled for me one or two doubtful points in connexion with these MSS. On the question of bindings he writes: 'Membranaceum uero inuolucrum quo ambo Msti teguntur saeculo xvio additum, ut ex litteris in umbilico utriusque uoluminis appositis inferri potest.'

About r600, then, $M$ and $P$ were disjoined, and $P$ was bound up with $\pi$. Poggio therefore had nothing to do with connecting $P$ and $\pi$; and, indeed, why should he conjoin authors so unrelated as Sigebert and Valerius-Asconius? ${ }^{2}$

That $P$ is throughout written in Poggio's hand there is no reason to doubt. Clark holds that $\pi$ also is a Poggian autograph. The hands of $P$ and $\pi$ are admittedly very dissimilar; but it is thought that this difference may be accounted for by supposing that $P$ is Poggio's more careful hand, while $\pi$ is swiftly and rather carelessly written. This explanation, however, is scarcely tenable. I showed photographs of both hands to Mr. Madan, who was not able to think them identical. He pointed out to me that even if it were possible to explain the dissimilarity of the minuscule characters by the hypothesis of a bella manus and a uelox manus, yet in both MSS. the capitals (initials and headings) are written with great care and are yet totally different, e.g. $P$ writes Ah, $\pi$ $\Lambda \mathrm{H}$. Moreover, I understand Clark to identify $P$ with the actual MS. sent by Poggio to Nicolaus. Yet, speaking of that MS. to Guarino (Tonelli, p. 29), he says that he wrote it uelociter. But $P$ and $\pi$ cannot both be Poggio's uelox manus.

As a matter of fact, it is improbable that $P$ is the actual MS. sent by Poggio to Nicolaus; for between 1423-9 Poggio is constantly asking Nicolaus to return to him this codex: e.g. Tonelli, pp. 207, 294, 303. The most instructive of the passages where he makes this request is p. 207: 'Expecto Valerium Flaccum, Pedianum, et Varronem, quae forsan transcribam, ni

[^15]
## INTRODUCTION I

distuleris in hiemem.' It is quite clear that he wants his MS. not to keep but to copy. Similarly elsewhere he tells Nicolaus that if he will only return Lucretius, so that he (Poggio) may copy it, Nicolaus may then keep it as long as he likes. It would be strange if when he finally got Asconius and Valerius he did not after all copy thent. And if he did copy them, surely it is more reasonable to identify $P$ with this later fair copy than with the Constance rough draft.

Let us see how all this affects $M$, which Clark holds to be the copy written for Poggio in Constance by a German scribe, and sent to Barbaro ${ }^{1}$-to be forwarded to Nicolaus. On p. 303 of Tonelli we find Poggio asking Nicolaus not only for Asconius but, inter alia, for Statius' Siluae also. He seems to have got this, and indeed all his MSS., by the year 1430-or earlier. For on September 3 of that year he writes to Nicolaus that the only book which he still wants is the Pliny which Leonardo has (p. 321). If he received the Siluae, then (i.e. the Barbaro copy), about 1430 , may we not suppose that he had it transcribed? We know that about 1426 he had acquired a Gallic scribe to whom he taught 'litterae antiquae', i.e. the Italian book-hand of saec. xv modelled on the tenth-century Caroline (p. 176, Tonelli). Is not $M$ just such a script as we might expect from such a scribe-the script of a Gallic scribe trying to write 'litterae antiquae'?

This scribe is twice mentioned (pp. 155, 160 Tonelli). He is a good writer who writes characters 'quae sapiunt antiquitatem', though it has been a long business to perfect him (edocui, p. 160). Incidentally his morals are thoroughly disreputable.

Be the morals of this scribe what they may, it is nevertheless not possible to identify him with the scribe of $M$. The scribe of $M$ is the kind of scribe who could by no possibility have found, let alone retained, a place in Poggio's familia. His writing is not 'good' but bad, and his ignorance of Latin is overwhelming. Such a scribe might do, in default of better, for a transcript made hurriedly in Constance. But it is unthinkable that Poggio should have entrusted the fair and final copying of his Constance transcript to so incompetent a copyist. ${ }^{2}$ On the other hand the scribe of $M$ answers admirably to the description which Poggio gives of

[^16]
## NOTE ON THE MADRID MS.

the transcriber of his Constance MS.-'ignorantissimus omnium uiuentium'. And Poggio's characterization of the work of this ignorantissimus exactly corresponds with our experience of $M$ : 'diuinare oportet, non legere.'

Here I reach the difficulty which it was the first object of this Note to posit. Since the titulus of $M$ is found to date from the sixteenth century, what grounds have we for connecting $M$ with Poggio at all? We have no means of knowing that $M$ and the certainly Poggian $P$ were conjoined before saec. xvi; and their conjunction has always been regarded as the most important evidence for the Poggian origin of $M .^{1}$

To attempt here a solution of this difficulty would carry me far beyond the limits which I have set myself. I will only say that I am not sure that the best witness to the Poggian origin of $M$ will not in the end prove to be Politian. But the very name of Politian in this connexion carries with it the noise of a controversy which I desire to avoid. ${ }^{2}$ I pass to the second of the objects with which this Note is written.

In $M$ foll. $\mathrm{x}-54 \mathrm{r}$ are occupied by Manilius, foll. $54 \mathrm{v}-59 \mathrm{v}$ are left blank, for the very apparent reason that they are the last eleven pages of a senio ${ }^{3}$ : the scribe's material gave out on the first page of the senio, and the other pages, as often happens, were left blank. 59 v is soiled; so that it would seem, Thielscher says, that Manilius formed one codex before it was added to Statius. As a matter of fact, the soiled condition of 59 v does not show that Manilius was once a codex by itself. If it had been it would have been bound, and the soiling would not have come about. The soiling merely shows that Manilius was written before Statius, and left lying about unbound while Statius was in progress. (Poggio more than once in his letters is bothered by the problem of how many authors, or works, or uolumina, he is going to conjoin in one codex.) The Manilius seniones, then, end at 59 v . We should
${ }^{1}$ It is, I think, a priori very unlikely that Poggio himself ever conjoined $P$ and $M$. They are written on different paper (the watermark is different : Thielscher, p. 89), and Poggio seems always to have been anxious that a single volume should be written throughout on the same paper ( $E p p$., Tonelli, pp. 150, $153,165,187,286,328$ ). The fact also that the one is in Poggio's own hand, the other in that of a scriba indoctus tells against the view that Poggio conjoined the two MSS.
${ }^{2}$ For the benefit of those interested in this controversy I would mention here (what I have not seen mentioned elsewhere) that Politian's collation of $M$ (if $M$ it was) in the Corsini copy of the Siluae was already known to J. Wouvver in $\mathbf{1 6 0 0}$. In March of that year Scaliger writes to Wouvver : ' In diem expecto quae Politianus olim Syluarum margini ex uetustissimo codice annotarat. Ea multum editionem tuam exornabunt,' Epist., L. B., 1627, p. $7{ }^{17}$.
${ }^{3}$ I know no mention, I may say in passing, in Poggio's letters of the use of seniones. I recall several mentions of quaternions and one of quinternions.

## INTRODUCTION I

expect Statius to begin at 60 r : as a matter of fact it begins at 64 r , four folios being left vacant. Now these four vacant folios are of different paper from the rest of $M$. Foll. 68-1 15 , on which Statius is written, form four seniones ; but $60-7$ form what may be called a sham quaternion. If this quaternion is examined, it will be discovered that foll. $64-7$ originally formed part of a senio: fol. 64 is actually numbered ' 9 ': it is page 9 of a senio of which the first 8 folios have disappeared; and, in the place of these 8 folios of a senio, 8 pages ( 4 folios) of quite a different paper have been glued on to foll. 64-7, to keep these leaves together ; and the senio has thus been converted into a quaternion, or rather into two sets of four folios. Really, therefore, there are missing before foll. 64-7 eight folios of a senio. Now Manilius occupies 5 seniones ${ }^{1}$ : Statius, 5 seniones minus 8 folios. From between the two there have been lost $x$ seniones ${ }^{2}+8$ folios. Thielscher points out that if you take Silius Italicus, count the lines, and arrange them in pages of 40 lines each ( $M$ has 40 lines to the page) you will get 12 seniones +8 folios; and remembering how, in the Poggian literature, Manilius, Siluae, and Silius are inseparably associated, he conjectures that $M$ at one time contained also Silius Italicus. ${ }^{3}$
I have no doubt whatever that this conjecture is a true one, and it constitutes an important addition to our knowledge of $M$. It carries us beyond $M$. In the periodical Serapeum in 1840 there was published a transcript of a ninth-century library catalogue which was then in possession of a German scholar, Lassberg. This was supposed, on its first publication, to be the catalogue either of the Cathedral Library at Constance or of the St. Gall monastery. Since then H. Blass has pointed out that it canriot have come from either of these two libraries (though Manitius still speaks of it as the Constance Catalogue), nor again from the neighbouring library of Reichenau. However this may be, certain features of it serve to connect it with the neighbourhood of St. Gall and Constance. Now one of the entries in this catalogue speaks of a MS. of 'Ouidii metamorfoseon. Sili et Stacii uolumen'. 'Stacii' is commonly referred to Thebais or Achilleis, but I have no doubt that this reference is false. From a fairly extensive acquaintance with the MSS. of Thebais and Achilleis, extant or lost-and the number of such MSS. runs up, I fancy, into something well over one hundred-I venture to affirm that neither

[^17]
## NOTE ON THE MADRID MS.

Thebais nor Achilleis was ever found conjoined in one volume with Silius. And since this Catalogue comes from the neighbourhood of Constance, and since $M$, which once conjoined Silius and Siluae, has its origin in the same neighbourhood, I have no doubt that in 'Sili et Stacii uolumen' the reference is to the Siluae.

Was the volume, then, to which this Catalogue refers, the actual MS. of Siluae and Silius discovered by Poggio (or Bartolomeo) in 1416? I am inclined to think that it was not, and that the real importance of the Catalogue consists in the evidence it furnishes that Siluae and Silius were known in saec. ixx, in the region where Poggio in saec. xv discovered, as is supposed, the parent of $M$. I am unwilling to identify the MSS. of this Catalogue with the parent of $M$ for the reason that I:believe the parent of $M$ to have contained, as $M$ does, Manilius as well as the Siluae (and Silius). The reasons for this belief I have already given. ${ }^{1}$

## APPENDIX II

## Manilius in Scaliger's Correspondence.

Most of the references to Manilius which are to be found in Scaliger's Letters, or in those of his correspondents, occur scattered up and down the pages of my Introductions. None of the collections of Letters from which they are drawn have Indices save Burmann and de Larroque. Burmann's Indices are quite inadequate; and one or two references have escaped de Larroque. It will perhaps be of interest, therefore, to students of Maniliusor of Scaliger-to have before them in one place all the references which I have been here able to collect. Some will no doubt have escaped me; but not, I think, many. I arrange these references so far as possible in chronological order.
$\mathrm{E}=$ Scaligeri Epistolae, L.B. $1627 . \quad \mathrm{R}=$ de Reves, Epistres françoises des personnages illustres et doctes à $J$. $J$. de la Scala, etc. : Harderwyck, 1624. L $=$ de Larroque, Lettres françaises inédites de J.J. S. : Paris, 1881. S = Burmann, Sylloge. C = Casauboni Epistolae: Magdeburg, 1656. The numbers refer to the pages of these works.
L. 20-3. Scaliger writes to P. Pithou for a MS. of Manilius and for any notes of Pithou upon Manilius. (Aug. 23, 1573.)
L. 26. Item. (Sept. 10, 1573 .)
S. ii. 306. Gifanius offers Scaliger a collation of $G$. (vii Id. Feb. r574.) ${ }^{2}$
S. ii. 308. S. Bosius writes to Scaliger: 'Manilium tuum ne diutius nobis inuideto. Efficies hac opera diligentiaque tua ut

[^18]xxxix

## INTRODUCTION I

Astrologi latine loqui tuo beneficio nunc primum discant.' (viii Kal. Dec. 1575 (?).)
L. 63. Scaliger writes to C. du Puy: 'Dernièrement en brouillant mes livres j’ai trouvé mon Manilius corrigé par moi du temps que j'estois in Helvetis.' He is now going to revise this, and send it to du Puy and Houllier for suggestions and corrections. (June 30, 1577.)
L. 69-70. Scaliger to du Puy: Manilius is already finished save for some references to Ptolemy. (July 30, 1577.)
L. 71. Scaliger to du Puy: the final draft of Manilius is being written out. (Aug. 26, 1577.)
L. 73. Scaliger sends the finished MS. to du Puy, who is to show it only to Houllier. (March 10, 1578 .)
L. 76. Scaliger to du Puy: the printing of Manilius has already begun. (May II, 1578 .)
L. 84. Scaliger writes to du Puy that he hopes to present his Manilius to Henri III. (June 29, r 578 .)
E. 58-69. Scaliger's Letter to I. Stadius. (Prid. Kal. Aug. 1579.)
E. 69-86. Scaliger's Letter to Patisson: Adversus barbarum ineptum et indoctum poema Insulani patronoclientis Lucani. (April 13, 1582. )

An answer to F. de Lisle's Mathematica pro Lucano Apologia, autore Insulano, Parisino procuratore: Paris, 1582.
L. 125-6. Scaliger sends the Adversus barbarum etc. to du Puy. (June 21, 1582 .)
L. 145. Scaliger to du Puy: 'Le venerable Insulanus' has published a poem in answer to Scaliger's Letter. (Aug. 31, 1583.)
L. 147. Scaliger to P. Pithou: item. (Aug. 3I, 1583 .)
(The answer of 'Le venerable Insulanus' was a hexameter poem of 22 pages entitled Francisci Insulani ad Iosephi Scaligeri Epistolam Responsio: Paris, 1583. De Lisle, it is interesting to note, lays claim (p. 7) to English ancestry.)
S. ii. 315. F. Morel, writing to Scaliger, and asking to be allowed to publish notes from him on the Sphaera Empedoclea, refers to the notes in Manilius on the Sphaera Graeca. (Non. Feb. 1585. )
L. 240 (note i). Scaliger writes to A. du Puy that he has received from him the copy of Paulus Alexandrinus, and hopes to make use of it for his second edition of Manilius. (Jan. 6, 1587.)
S. i. 4II. F. Junius writes to Lipsius concerning his Variae Lectiones and the reprint of Scaliger's text. (March 26, 1589 .)
E. 452. Scaliger writes to thank H. Lindenbrog for some notes on Manilius. (xiv Kal. Feb. 1596 (?).)
E. 453. 'Andromedam nobis soluat' (to H. and F. Lindenbrog) -a reference to Manilius ii. 28-9. (x Kal. Mart. 1596 (?).)
E. 135. Scaliger writes to I. Dousa: 'Exemplar luculentum Germanici est nunc in manibus patris tui : una cum Manilio cum

## MANILIUS IN SCALIGER'S CORRESPONDENCE

uetere codice collato. Qui et ipse non tanti momenti est.' (xiv Kal. Apr. 1597.)
(I deduce the year from the reference to the receipt of Casaubon's Suetonius, comparing the letter to Casaubon, p. 157 init.)
S. i. 242. Scaliger writes to Lipsius that he has been for two months preparing a second edition of Manilius, employing $G$. He asks for Carrio's collation of $G$. (vi Id. Mart. 1598.)
E. 165-6. Scaliger writes to Casaubon about Junius' Variae Lectiones and the second edition of Manilius. (xvi Kal. Apr. 1598.)
E. 167. Item; but Junius not mentioned. (xvii Kal. Jun. 1598.)
E. 173-4. Another letter of Scaliger to Casaubon about Junius. Manilius ed. ii is already printing. (iii Id. Oct. I598.)
E. 357. Scaliger to Velser: 'Id nos explicamus alibi.' Colo mesius, Clavis (Opusc. 1659) explains this as a reference to Manilius. (xiii Kal. Feb. 1599.)
C. 208. Casaubon writes to Scaliger: 'Manilium tuum edi fama ad nos peruenit.' (vi Kal. Aug. r 599.)
S. 242 : no. 239. Scaliger sends Lipsius a copy of his second edition ('Virbius'). (Sept. 30, r599.)
E. 177. Scaliger sends his second edition ('Virbius') to Casaubon. (xii Kal. Oct. 1599.)
R. in6. J. Gillot writes to Scaliger: 'Nous attendrons donc vostre Manile.' (Sine anno; but the reference in the letter to Daniel's Virgil, combined with a comparison of C. 208, above, and R. 137, 49r, following, fix the date as Aug. to Nov. 1599.)
R. 137. H. de Monanthveil thanks Scaliger for a copy of the second edition received through Gillot. (Nov. 29, 1599.)
R. 491. Rigault thanks Scaliger for a copy of the second edition received through Gillot. (Nov. 30, 1599.)

## II

## OTHER MSS. AND AN ATTEMPTED CLASSIFICATION

> 'Sed ante omnes is scriptor qui nunc Manilius perhibetur iratis librariis natus est.'-Bentley, Letter to P. Burmann.

I will speak first of four lost MSS.

1. Codex Politiani. A certain Pietro Leoni, a professor of medicine in Padua, ${ }^{1}$ showed to Politian in r49r a MS. of Manilius which Politian pronounces 'as old as any codex he had ever seen'. Politian carried this off (one hopes with Leoni's leave, but the morals of Renaissance scholars in such matters were lax) to Venice, where he collated it with a printed text, which must have been one of six texts-Regiomontanus, ed. Bononiensis, the two Naples editions, Bonincontrius, Dulcinius. ${ }^{2}$ Somewhere in one of the libraries of Europe there still perhaps lies, awaiting discovery, the copy (of one of these six texts) in which Politian made his collation. The finding of this volume would be an event of incalculable importance for Manilian criticism. For Sabbadini, who has studied with great care the language which Politian uses in describing other MSS., ${ }^{3}$ speaks of the date of the Paduan codex thus: 'Se di Manilio dice "che io per me non ne viddi più antiqui", bisognerà credere che fosse in maiuscolo o communque anteriore al sec. ix. ${ }^{\prime 4}$

It is tempting to identify this MS. with the codex (I will call it a) of which I have already spoken as 'lying behind our archetype' -the source of the true readings peculiar to $G$. a can scarcely have been later, and from its excellent readings may well have

[^19]
## OTHER MSS.

been earlier than the tenth century. And we have no hint of any other MS. of Manilius of such an antiquity. Traube ${ }^{1}$ finds the provenance of $G$ and $L$ in Lorraine. Whence Leoni's MS. came to him is beyond conjecture. It is noticeable that he was a doctor of medicine, since in so many of our MSS. (UR $V^{2} H$ Caes.) Manilius is bound up with medical treatises.

That Politian's MS. cannot be identified with $A$-the Poggian original-will be obvious to any one who has read what I have said about $A$ on pp. xxv sqq., and who will further trouble to read the section upon the Madrid MSS., $M_{3 I}$ and $X 8$ r.
2. Codex Pithoeanus. All that has hitherto been known-or at any rate related-of this MS. is just so much as is to be found in the Praefatio ${ }^{2}$ to Bentley's edition: 'Usus est praeterea codice P. Pithoei, cuius uarias lectiones in margine editionis primae Bononiensis uidit: hic quasi medius est inter uetustos illos ( $G L$ Venetus) et recentiores et in plurimis convenit cum Vossiano.' I think I am in a position to add something to our knowledge of this lost codex, and to convict the Praefatio of Bentley's edition, i.e. Bentley's nephew, of error. Two letters of Bentley (xvii and xviii, ed. 1842, pp. 36-7) deal with this MS. Bentley writes to the Rev. Dr. E. Bernard, living in Holywell, Oxford, thus: 'Among Sir Edward's (i.e. Sherburne's) papers I find the collationes ex Mo Cod. Pithoei upon the first book : this, he tells me, he borrowed of you, being Scaliger's edition with those variations in the margin. . . . I find by what Sir Edward hath transcribed that it was no very old book, being of the last rate of books, equal to the Codex Palatinus, that of C. C. C. and your own ${ }^{3}$ in $4^{0}$, and those from whence the first editions were printed; the second rate is an Italian MS. whose variations are written by Is. Vossius in the Bononian edition: this I call a young Gemblacensis . . . it confirms the Gemb. in hundreds of places for which before we had but one witness' (p. 36). It is, surely, clear that the Codex Pithoei is a MS. quite distinct from the MS. referred to in the portion of this letter which I have italicized. Codex Pithoei and the 'young Gemblacensis' are two quite different MSS. But Bentley's nephew, misunderstanding this letter, has supposed them to be one and the same. The 'young Gemblacensịs' is the MS. of which I shall speak presently as

[^20]
## INTRODUCTION II

‘Vossianus tertius'. Letter xviii of Bentley throws a fuller light on the Codex Pithoei. The facts seem to be these. Sherburne had lent to Bentley his collation of Codex Pithoei for Book I, or rather his copy of Pithou's collation. Pithou's collation (not Pithou's MS.) was in Bernard's possession. It was a collation in 'a printed edition (he, sc. Sherburne, thinks Scaliger's in quarto) with those variations in it manu Pithoei' (p. 37). Now in the Bodleian Library (Linc. D. 5. 13) there is a copy of Scaliger's second edition (Leyden, r600) which once belonged to Pierre Pithou. On the front page is written 'P. Pithoei Luyerii'. The volume contains a collation of some unnamed MS., and at the foot of p. I3I there is a subscriptio: 'collatus cum MS., Calendis Iuliis mDCxini. Tricassib. Pithou.' mDCxin is clearly a blunder for mbxinc, for Pithou died in $1596 .{ }^{1}$ (The fact that this collation was made at Troyes (Tricassibus)-where Pithou was born and where he retired to die-makes it likely that the MS. was his private property.) ${ }^{2}$ This Bodleian collation may be supposed, I think, to be the same as that used by Bernard, Sherburne, and Bentley. The affinity of Pithoeanus with other MSS. is easily discerned. The Codex Cusanus (a copy, probably of $L$ ) omits III. 188, IV. 235, 312, 746. All these verses are omitted also by the Codex Marcianus; but in Marcianus (which has been revised with some MS. of the $M$ family) they are all added in the margin, with the exception of IV. 312. Now the Codex Pithoeanus contained all these verses in its text save IV. 312. The same is true of Vat. s160, Pal. Par. Monac. ${ }^{3}$ All five MSS., therefore, may be regarded as descendants of the Codex Marcianus tinctured in varying degrees with the $M$ tradition. It was not worth my while to examine the readings of the Pithoeanus throughout. But

[^21]xliv

## OTHER MSS.

I compared its readings carefully with those which Thielscher has recorded from Marcianus. I was at first half inclined to identify the two MSS., but certain discrepancies proved too strong for this hypothesis. So closely do the two agree, however, that I have little doubt but that Pithoeanus is derived from Marcianus or some copy of Marcianus. Further, it is possible that Par. is descended from Pithoeanus. It agrees with Pithoeanus in omitting III. $370 .{ }^{1}$
3. Vossianus tertius. The Bodleian Library possesses a copy (Auct. O. 5. 17) of the editio Bononiensis, containing a collation of that text with some MS. of Manilius designated $V$. This copy bears on the fly-leaf in faded letters the name 'Isaaci Vossii'. The readings in this collation correspond in detail with those of no known MS. Yet they reveal sufficiently the cognation of the MS. from which they are taken. This MS. omitted all the lines omitted by the Cusanus, and may therefore be regarded as descended from that MS. ; see below. In addition it omitted the whole of IV. 10-320 (sic). In GL IV. 10-313 are transposed to follow III. 399. Nothing is said in the collation of any transposition at III. 399, and we may conclude therefore that in $V^{3}$ (for so, I think, we are entitled to designate this MS.) an attempt had already been made to rectify the disorder : an attempt, however, which resulted in the complete loss not only of IV. 10-313, but of the seven following lines in addition. Other peculiarities of $V^{3}$ are that it omits II. 716-17 (which are also not found in the Palatinus) and V. 335. At II. 592 it has mortique locatur, and reads at IV. 745 gelidum tepidi per tempora ueris. At I. 916 it omits alea, but a late hand has written in Leucas. ${ }^{2}$

Ellis in the Introduction to his Noctes Manilianae ${ }^{3}$ mentions this Bodleian collation. He says of it, however, mistakenly, that it is a collation of $V^{1}$. That this is impossible is clear from what I have already said-particularly from the lacuna IV. 10-320. But $V^{1}$ and $V^{3}$ are very twins none the less.

The Bodleian contains yet another collation of $V^{3}$ made with the text of Scaliger's first edition, Paris, 1579 (Auct. S. 5. 29).

[^22]${ }^{3}$ p. xi.

## INTRODUCTION II

The two collations sometimes disagree in small points, and Auct. S. 5. 29 is clearly rather carelessly made.

Bentley's Preface, as I have noticed, says that Bentley found the collation which he used of the Pithoeanus in a copy of the editio Bononiensis. I have shown that this statement rests upon a confusion. Bentley was in Oxford when the library of Isaac Voss was offered for sale to the Bodleian. ${ }^{1}$ He exerted himself unsuccessfully to secure its purchase. But Vossius' copy of the ed. Bonon., with Vossius' collation of the 'young Gemblacensis', clearly passed to Bodley. It must, I think, have been purchased by Bernard in r689, when Vossius died. Bernard was an indefatigable collector of rare books and MSS., particularly astronomical MSS., and on his death in 1696 a large part of his library was purchased by the Bodleian. Linc. D. S. 13 undoubtedly belonged to him. He possessed also the MS. of Manilius which is now in the Bodleian; ${ }^{2}$ and it is the natural inference from Bentley's Letter that he also owned the copy of ed. Bononiensis which Bentley mentions in conjunction with Pithou's book and the Bodleian Codex.

Bechert's reference to this MS. (Leipz. Stud., 1878, pp. I sqq.) I do not understand. But he is clearly in error when he says that the Vossianus mentioned in Bentley, Praef. xiv, is Voss. tertius. It is our old friend $V^{2}$. I am not sure, again, of the meaning of the paragraph in Jacob's Praefatio, xiv (to which Bechert refers without comment), in which Jacob speaks of Spanheim's collation. Jacob has here, I fancy, made the same mistake as Ellis-confusing a collation of $V^{3}$ with one of $V^{1}$. The MSS. which Spanheim collated in Voss' house at Windsor in 1679 will thus be $V^{2}$ and $V^{3}$.

In what I have here said of Bentley's use of Pithoeanus and $V^{3}$, I had originally nothing but conjecture to rely upon. But the inference to which I was led by a rather tedious process of investigation, I have since been unexpectedly enabled to confirm in every particular. The Library of Trinity College, Cambridge, zontains a copy (B. 17. 29) of Scaliger's second edition (1600) presented by Scaliger to Clusius. On the fly-leaf, in Scaliger's unmistakable hand, is written 'Clariss' uiro Carolo Clusio Ios. Scaliger D.D.' This book became subsequently part

[^23]
## OTHER MSS.

of the library of Bentley, and in it Bentley has made collations of nine MSS. -the two Oxford MSS., $V^{2} G L$, the Palatinus, the Venetus, and finally the Pithoeanus and $V^{3}$. Of $V^{3}$ he says definitely that he took its readings from the margin of ed, Bonon. He adds 'eundem esse suspicor cum Vossiano, nam fere conveniunt'. That this is an error I have already shown. The collation of Pithoeanus, again, merely reproduces Pithou's notes as they are given in the Bodleian Linc. D. S. I3.

It is to be regretted that no Manilian student has called attention before to this book. I first became aware of its existence from a note in Wordsworth's Correspondence of Bentley, p. 745. It is important not for what it brings to the text of Manilius, but for what it enables us, by a better classification of our MSS., to leave behind. I have still to speak of one MS. of which it gives us for the first time an adequate knowledge-the Venetus.
4. Codex Venetus. This MS. has hitherto been known to us from occasional citations of it in Bentley's edition, and a couple of references to it in Gronovius' Observationes. Bentley assigned it on Gronovius' authority to the eleventh century. ${ }^{1}$ Breiter has supposed that Gronovius mistook a fifteenth for an eleventh century MS., and has wished accordingly to identify the Venetus with the only MS. of Manilius which is to-day to be found in Venice-the Marcianus. That this identification is impossible has been shown clearly by Thielscher's examination of Marcianus. ${ }^{2}$ But it is not unlikely that, as Thielscher suggests, Ven. is one or other of two MSS. of Manilius known to have been at one time in the Library of St. Antonio. ${ }^{3}$ On the other hand, Thielscher's guess that Ven. and the Holkham MSS. are one and the same (some of the St. Antonio books passed to Holkham) is shown to be wrong by my own examination of the Holkham MS. I would refer the reader to the account which I have given of this MS. in the Classical Quarterly, 1909, pp. 57-9. It suffices to say here that while the Holkham MS. belongs to the pure Italian family (being possibly a copy of $M$ ), Ven. belongs to the Belgian recension. In the Trinity College volume which I have already mentioned Bentley has preserved to us, not indeed a full collation of

[^24]
## INTRODUCTION II

Ven., but a body of excerpts sufficiently large to enable us to judge fairly of its character and of its position among the Manilian MSS. These excerpts are indeed a ép $\mu$ aıov of very considerable interest. It is true that Ven., as they now allow us to see it, is a MS. which will not in any important passage alter the text of Manilius. Bentley could hardly have failed to note in his edition any of its readings which were at once new and true. On the other hand, our best MS., $M$, was unknown to Bentley, and he had necessarily no perception of the true relations subsisting between the Belgian and Italian stocks. On those relations the rediscovery of Ven. will be found, I think, to throw a good deal of light. In my Apparatus Criticus I have cited all the readings of this MS. which Bentley has recorded in Book II, save for a-not inconsiderable-number of places where the confused condition of his notes (notes made for himself and not for others) made it not possible to determine with certainty what reading Ven. really offered. (In the narrow margins of a single volume Bentley has crowded together the readings not only of nine MSS. but also of several editions-to say nothing of his own conjectures.) I hope in another place to print all the readings of Ven. for Books I and III-V. Here I shall call attention only to what I regard as salient lections. But they will, I think, sufficiently reveal the character of this MS. After GLM it is, I have no doubt, the most important of our Codices.

It represents, as I have said, the un-italicized Belgian tradition. So in the main does $C$ : so in a less degree does Marc. But the importance of Ven. consists in the fact that, unlike $C$ and Marc., it is independent of $G L$. While it agrees in the main with $G L$ against $M$, yet it sometimes agrees with $M$ against $G L$, sometimes with $L M$ against $G$, sometimes with $G$ against $L M$. Unless we are to suppose with Breiter that Gronovius (who was very unlikely to do so) mistook a fifteenth-century MS. for one of saec. xi, and that the $M$ readings have come into Ven. actually from $M$, then we can only explain our facts by deriving Ven. from some MS. of the $G L$ type which occasionally preserved more faithfully than $G L$ the reading of the archetype. I had perhaps, therefore, better begin by saying why I think it impossible to assign Ven. to the fifteenth century.
(1) Despite its occasional agreements with $M$ it represents the $G L$ tradition in a manner so distinctive as to make it unlike any xlviii
fifteenth-century MS. with the exception of Marc. (which is a copy of $C$ ), or some descendant of Marc., as e.g. the Pithoeanus. The contamination has not gone far enough.
(2) It is not, like Marcianus, derived from C. For though it omits, as do GL, III. 188, it contains IV. 3 ${ }^{\text {12, }} 746$. (At IV. 235 Bentley's notes, as so often at important places, are silent.)
(3) Though Bentley does not tell us whether it has been affected by the great transposition III. 399-IV. 10, yet he does tell us that with $G L$ it omits IV. 731-2 and V. 12 $b-13 a$ preserved by $M$. This would hardly have been the case if it had been corrected by the aid of $M$.
(4) It as often as not imports into its text readings of $M$ which are false and meaningless, where the Belgian text has the true lection.
(5) Occasionally its readings are true or half true where those of all our other MSS. are false, and one or two of these half-true readings (though I am clear that it is a MS. which has suffered much from interpolation) can hardly have been reached by conjecture.
(6) The only reason that can be alleged for assigning it to saec. xv is that it came from Venice, and that the only Manilian MS. now in Venice, Marc., is of fifteenth-century date. But that Ven. and Marc. are not one and the same MS. was made clear as soon as their readings were placed side by side.

I proceed to give a list of passages where Ven. agrees with $M$ against $G L$.
I. 184 fata $V e n . M$ : facta $G$ : facta $L$.
I. $33^{2}$ cingentem Ven. $M$ ex corr.: ingentem $L$ : ingens $G$.
*I. 631 aeterna . . . sede Ven. $M$ : aeternam sedem $G L$.
I. 749 referentia Ven. $M$ : reserantia $G L^{2}$ : reserentia $L^{1}$.
${ }^{*}$ I. 787 parens $V e n$.: patens $M$ : parent $G L$.
I. 850 exuruntque polum Ven. : exuruntq. uiam ( $=$ exuruntq. pulam) $M$ : exuruntque procul $G L$.
II. 172 priori Ven. $M$ : prioris $G L$.
*II. 315 numerique Ven. $M$ : numerumque $G L$.
*II. 323 et uenit Ven. $M$ : euenit $G L$.
*III. 32 quorumque Ven. $M$ : quorum quaeq(ue) $G L$. casus $G L$ : om. $M$ : cursus $V e n$.

[^25]
## INTRODUCTION II

*III. 83 condita arte $M$ : conditaque arte Ven.: condita parte GL.
III. 292 cadendi Ven. $M$ : canendi (suprascr. oriendi) GL.
III. 420 quod ademitur Ven. $M$ : quota demit (cum ras. L) GL.
III. 540 agi Ven. $M:$ agit $L:$ agit $G$.
III. 635 satis $V$ en. : status $M$ : status $L$ : situs $G$.
III. 641 riget $V e n$. : figit $M$ : fugit $G L$.
III. 66r uincant $V$ en.: uincat $M$ : uincát $L$ : uincit $G$.
*IV. 120 plexo Ven. $M$ : flexo (-os $L$ ) $G L$.
IV. 245 eget Ven. $M$ : êgèt $L$ : agit $G$.
*IV. 28 r mundum Ven. $M$ : mundi $G L$.
*IV. 350 ingrati $V e n . M$ : ingratus $G L$.
IV. 369 coniunctisque Ven.: iunctisque $M$ : cunctisque $L$ : cunctis $G$.
IV. 480 nonumque $\operatorname{Ven.}$. : notumque $G L$.
IV. 609 adriam Ven. $M L^{1}$ : atque adriam $G L^{2}$.
*IV. 780 Thirrenos Ven. $M$ : Tirrhenis $L^{1}$ : Tirrhenas $G L^{2}$. radiat Ven. $M$ : radiatus (radiat' $L$ ) $G L$.
*IV. 868 prohibet quae Ven. : prohibetque $M L^{1}$ : phibetq. a $L^{2}$ : prohibetque e $G$.
IV. 877 census Ven. $M$ : censum $G L$.
*V. 41 puppi Ven. $M$ : puppis $G L^{2}$ : puppim $L^{1}$.
*V. 81 obsantemque mora totum $M$ : obstantemque mora tantum $V$ (which came from obsanantemque mora totum, the suprascript correction being misunderstood) : obstantemque mora totum $G L$.
*V. 155 lactant $V e n . M$ : lactant $L$ : iactant $G$.
V. 179 conatus Ven.: conatur $M$ : conatum $G$ et (ex -us corr.) $L$.
V. 185 montes $M$ : mentes $V e n$.: montes $L$ : mortis $G$.
*V. 201 proaui Ven. $L^{1}$ : proam $M$ : proauis $G L^{2}$.
V. 224 rabit Ven. $M$ : rapḅit $L$ : rapit $G$.
V. 234 orta Ven. $M$ : ora $G L$.
*V. 258 liliaque] iliaque $M$ : uiliaque Ven.: liliaque $G L$.
V. 282 silici] silicis Ven.: liti $M$ : luci $G L^{1}$ : luti $L^{2}$.
V. 319 illo Ven. $M$ : illo $L$ : ullo $G$.
V. 324 scenae Ven. : stenae $M$ : sienae $L$ : sene $G$.
V. 336 carmina Ven. $M$ : carmine $G L$.
V. 361 sancta Ven. $M: \overline{\text { sca }} G L$.

## OTHER MSS.

*V. 388 pascere Ven. M: passere $G L$.
V. 437 studium Ven. $M$ : studị̣m ot $L$ : studet et $G$.
*V. 547 primatis $V e n$. : priuatis $M$ : pronatis $L$ : pro natis $G$.
*V. 566 leuis Ven. $M$ : leuiṣ $L$ : leui $G$.
V. 622 superbe Ven. M: superbae $G L$.
V. 701 hora Ven. M: ora GL.

These are places where Ven. agrees with $M$ against $G L$. I have included one or two (out of many) examples of agreement between Ven. $M L^{1}$ against $G L^{2}$. And I will here add that Ven. $L M$ are constantly ranged together against $G$. Yet I think that nowhere do Ven. $G M$ agree against $L$. And this is instructive, because, though Ven. stands in general much nearer to $L$ than to $G$, yet there are a certain number of places where it sides with $G$ alone against $L M$. I give the more important of these.
I. 554 tanta Ven. $G: \operatorname{tantam} L: \operatorname{tante} M$.
I. 712 fingens $V e n . G$ : fingens $L$ : findens $M$.
I. 740 rigentem $V e n$. $G$ : regentem $L M$.
I. $75^{6}$ conuexit Ven. $G$ : conúexit $L$ : contexit $M$.
I. 820 cordibus $V e n$. $G$ : torridus $L M$.
I. 863 ne Ven. $G$ : num $L$ : cum $M$.
II. 46. natram $V e n . G$ : natum $L$ : nacta $M$.
II. 117 nisi Ven. $G$ : ${\underset{\mathrm{n}}{\mathrm{i}}}_{\text {nie }} L$ : sine $M$.
III. 69 sorte Ven. $G$ : sortem $L M$.
III. $3^{28}$ scandensque Ven. $G$ : scandensque $L$ : scandesque $M$.
III. 487 multiplica . . . dece . . . Ven. $G$ : multiplicans (-plicatis $L$ ) deciens $L M$.
III. $53^{\circ}$ annus annis $V e n . G L^{2}$ : annus anni $L^{1} M$.
IV. 189 duxit Ven. $G$ : dixit $L M$.
IV. 243 uesta tuos Ven. $G$ : restat uos $M$ : uå stat uos $L$.
IV. 315 quotcumque $V e n$. $G$ : quodcumque $L M$.
IV. 385 tui Ven. $G$ : suis $L M$.
IV. 438 signanda Ven. $G$ : signananda $L$ : singenda $M$.
IV. 453 tunc $V$ en. : tū $G$ : tu $L:$ tri $M$.
IV. 461 quinae $V e n . G$ : quintae $L M$.
IV. 489 sexta refertur Ven.: sexta feretur $G$ : vii (sic) fertur $L M$.
IV. 5 10 ut ruat et uincat $V e n . G$ : et ruat ut uincat $M$ : et ruát et uincat $L$.
IV. 517 tergore uexit Ven. $G$ : tergo reuexit $M$ : tergổ reuixit $L$.

$$
\text { li } \quad \mathrm{d}_{2}
$$

## INTRODUCTION II

IV. 524 nocte Ven. $G$ : docte $L$ : dote $M$.
IV. 528 uocesque Ven. : uocisque $G$ : uecisque $L M$ (uecisque arose from a misunderstood correction uocisque).
IV. 831 orbem Ven. $G$ : urbe $M$ : Urbes $L$.
V. 29 quenque Ven. $G$ : quēque $L M$.
V. 43 transmare Ven. $G$ : transnare $L M$.
V. 107 abruptamque Ven. $G$ : abruptumque $L M$.
V. 286 habetur Ven. : habeatur $G$ : habeatur $L$ : habitatur $M$.
V. 287 exstructu Ven. : exstructos $G$ : destructos $L M$.
V. 364 claudunt Ven. $G$ : claudant $L M$.
V. 488 potantis Ven.: portantis $G$ : rotantis $L^{1} M$ : rorantis $L^{2}$.
V. 528 perfunctoque Ven. $G$ : perfuntoitque $L$ : perfunditque $M$.
V. 651 exsurgit Ven. $G$ : ent surgit $L$ : consurgit $M$.
V. 663 nectent Ven. $G$ : nectant $L M$.
V. 672 florumque $V e n$. $G$ : florúmque $L$ : floremque $M$.

It is now, I think, apparent that Ven. is an independent representative of the Belgian family, and its readings as a whole, therefore, must command attention. It cannot be supposed that a MS. which, though it usually sides with $G$ and $L$ against $M$, yet often agrees with any one of these three MSS. against the other two, has not occasionally preserved something in our archetype which these three have all lost. But here we are met with a problem of considerable difficulty. Ven. offers a number of readings which appear, on the face of things, superior to those of our other codices-some of them have already found a place in our texts. Here are some examples:
I. 718 diductis. II. IIo infidas. 213 tunc. 246 toruus (but cf. ad loc.). 377 uisus. III. 26I utrimque. 288 a sidere. 641 riget. IV. 223 peragrant. 493 accumulans. 688 diuis et. V. 15 tremendum. 29 quota de. 33 I garrulaque in. 610 iterum remeauit.
Not only this, but once or twice under a corruption in Ven. we are able to detect hidden truth; e.g. I. 78 sideret orbis] sidera et orbis Ven.: sidera orbis $M$ : sidera nobis $G L$. I. 799 parti] partis Ven.: partus cett. I. 789 pares] parens Ven.: patens $M$ : parent GL. III. 256 austros] austro Ven. : astro cett.

These are examples of a faithfulness rather rare in Ven. For it must be recognized plainly that this MS. contains a considerable number of indubitable interpolations. The following examples may suffice:
I. 602 fines sortemque] per sortem fine Ven. (whose scribe was trying to correct what he read as fine sortemper).
I. 741 mundo . . parente] mundi . . . parente Ven.
I. 764 Pyliumque] Iuliumque Ven.
I. 789 certantesque Deci] certantes Decii Ven.
II. 357 nostras demittit in auras] demittit noster in auras Ven. (no doubt an attempt to remedy a transposition demittit nostras).
III. 521 numerari] numerando Ven. (numerandi cett.).
III. $533^{-8}$ ortu sidere] hora sidera Ven.
III. 609 dena] nona Ven.
IV. 152 mollius] follibus Ven. : mollibus cett.
IV. 164 lucesque reflectit] lucisque reflexae Ven.
IV. 257 luce Ven. : pisce cett.
IV. 447 laedit] laudi est Ven.
IV. 574 uenenum] mouentis Ven.: mouentum cett.
IV. 85 I sicut luna suo tum tantum deficit orbe] sicut luna nouum tantum defecit in orbem Ven.: sicut lunas uotum tantum deficit orbe $M$.
V. 41 rector erit puppis] uectus erit puppi Ven.: pectus erit puppim $L$.
V. 66 mane] pace Ven.
V. 576 destinat in] festinat $V e n$.
V. 636 come] Roma.

These are undeniable examples of bad interpolation. They are the meddling of a scholar (of a kind), and they bring into suspicion the authenticity of a good many of Ven.'s correct lections. They make it not unlikely that such readings as I. 718 diductas, II. 29 solantemque, II. 1 Io infidas, III. 641 riget, \&c., mentioned above, may be no more than conjectural restorations. I have little doubt that we must refer to conjecture some other readings of Ven. which are in themselves perhaps unobjectionable, such as I. 433 contorquens for conuoluens, I. 800 regna for signa, III. 4 indictos for indignos, IV. $5^{18}$ tempora for sidera, IV. 84 I qua for quo, V. 23 necans for negans, V. 469 facies for species, V. 477 curasque for $d(h)$ arusque.

One kind of faithfulness, however, Ven. does possess. It redeems sins of commission by the virtue of omission. Here are some notable omissions:
IV. 4 I4 quaque . . . fuerit, 498 frigore et igni, 776 Caesarque

## INTRODUCTION II

meus, V. 34 quo uertere Iolcon, 57 decuma lateris, 362 suo, 420-1 perlabitur . . . scindens, 716 et . . . draconis.

These gaps should mean that Ven. was copied from a codex which was, where they occur, illegible. This is important as indicating ( I ) that Ven.'s original was probably a MS. of some antiquity ; (2) that its original was no one of the codices known to us ; (3) that Ven. itself perished without progeny. (2) and (3) are further supported by the fact that Ven., besides omitting the lines omitted by GL, omits also the whole of IV. 298 (ut ex Bentleii notis uidetur), IV. 367 , IV. 422, V. 465.

One or two readings not in themselves intelligible are worth pondering, as IV. 644 suam (for potius), V. 322 manibus for urbis (uerbis). It is also worth noticing that certain of the readings of Ven. reappear in $V^{3}$; e.g. I. 13 altum, I. 629 aeterna . . . sede (so $M$ ), I. 8 II euentus, II. 29 solantemque: $V^{3}$ is perhaps a descendant of $C$ revised by the aid of Ven.

Of this codex as a whole I should be inclined to say that it affords an interesting illustration of the vanity of so many of our palaeographical inferences. It is an early MS., perhaps as old as any that we have. Yet it has already suffered interpolation serious both in quantity and quality. It is the only MS. of the Belgian family which can safely be pronounced independent of $G L$, and from this independence we might well have hoped much. Yet it clears up no single desperate passage. Of its new readings those that are true lie under the suspicion of conjecture. And, speaking generally, its chief importance consists in the proof it affords that a not inconsiderable number of readings hitherto thought peculiar to $G$ or to $L$ or to $M$ are not mere accidents in those MSS., but go back to some more primitive source. It must be remembered, however, that Bentley's (or Gronovius') notes are not a collation. Where they are fullest they are only excerpts, and neither Bentley nor Gronovius was in a position to determine exactly what excerpts would be most useful to-day to critics studying the interrelation of MSS. in accordance with principles which were not fully understood until Lachmann.

In speaking of these four lost MSS., I have already done something towards classifying certain others of the Codices Deteriores. I append now a provisional Stemma Codicum Manilianorum Omnium. I would emphasize its provisional character, and will try to explain briefly the principles which have guided me to liv

## OTHER MSS.

my grouping of these MSS. But first I will give a complete list of the known MSS., with the symbols by which I propose to distinguish each of them.

## I. Stirps Italica.

M. Matritensis, Bibl. Nat. M 31, anno 1417 scriptus.
U. Urbinas 667 , saec. xv.
R. Urbinas 668, saec. xv.
H. Holkhamicus 33I, saec. xv.
$\mu$. Caesenas, anno 1457 scriptus.
$V^{2}$. Leidensis 3 (Manilius II. 684-V. 745), anno 1470 scriptus ('Vossianus secundus ').
II. Stirps Belgica.
G. Bruxellensis 10012 (Gemblacensis), saec. xi.
L. Lipsiensis, Bibl. Paulin. 1465, saec. xi.

Ven. Venetus quidam deperditus, saec. xi.
C. Bruxellensis ro6g9 (Cusanus), saec. xii.
$V^{1}$. Leidensis 18, saec. xv ('Vossianus primus').
v. Leidensis 3 (Manilius I-II. 683), anno 1470 scr. ('Vossianus secundus').
C. Marcianus cl. xii. cod. 69, saec. xv.
$V^{3}$. Vossianus deperditus (Bodl. Auct. O. 5. 17).
Pith. Pithoeanus deperditus (Bodl. Linc. D. 5. 13).

## III. Stirps Pannonica.

P. Palatinus 17 II , anno 1469 scriptus.
p. Parisinus 8022, saec. xv.
g. Monacensis $\mathrm{I}_{5743}$, saec. xv .
$r^{1}$. Vaticanus 5160 , anno 1469 scriptus.
$r^{2}$. Vaticanus 3097, saec. xv.
$r^{3}$. Vaticanus 1653, saec. xv.
$r^{4}$. Vaticanus ${ }^{1}{ }^{172}$, saec. xv .
B. Barberinianus 124 , saec. xvi.
O. Bibl. Coll. Corp. Christ. Oxon. 66, saec. xv.
F. Laurentianus 30. 15, saec. xv.
b. Bodleianus Auct. F. 4. 34, saec. xv.

## INTRODUCTION II



The pure Italian group stands out clearly- $M$ and its five derivatives, ${ }^{1} U R H V^{2} \mu$. Between $M$ and $U R H$ there lies at least one now lost copy $(m)$; for so only-since they are independent of one another-can we explain the fact that they all conjoin Manilius and Serenus. $R$ seems from its readings, so far as these are known, further removed from $M$ than either $U$ or $H$. Between $M$, again, and $V^{2}$ there lies at least one now lost codex $(x)$; for, as I have pointed out elsewhere, ${ }^{1} V^{2}$ was copied from a MS. containing 26 lines to each page. These facts have importance only for lines $\mathrm{I}-82$ of Book I.

The pure Belgian family consists of $G L$ Ven. (all saec. xi), $C$ (saec. xii), and the five fifteenth-century MSS., $V^{1}, v, c, V^{3}$, Pith.,

[^26]
## OTHER MSS.

of which the first three are (as I have already pointed out) probably copies of $C$, while the last two are, it seems likely, copied from $c$. The beginnings of the process of italicizing the Belgian family are to be seen already in the corrections of $c$. So far as can be judged, all the codices of the mixed, or Hungarian, family are descended from $c+m$ ( $m$ standing here for one or more MSS. of the stirps Italica). ${ }^{2}$ This is certainly true of $P, p, g, r^{1}$-these four MSS. form a clear group. ${ }^{3}$ Another more or less defined group is $F,{ }^{4} b, r^{2}$. Their close interrelation may be inferred from the fact that in their tituli they all ( $\mathbf{r}$ ) give the dedication to Augustus (so $v$ however) ; (2) add 'poetae' after the name 'Manilii'.
There remain $B, o, r^{3}, r^{4}$, which there are no data for classifying. $B$ seems to be the latest of all our MSS.-several printed editions had already appeared when it was written. o contains some curious transpositions which I have not seen reported from any other codex. But it seems unlikely that from any of the MSS. of the Hungarian family there will emerge anything of value for the text of Manilius.
${ }^{1}$ C. Q., iii. 1, p. 599.
${ }^{2}$ By $c+m$ I mean that the basis is $c$, the admixture of $m$ varying considerably in the different MSS.
${ }^{3}$ See above, pp. xliv-xlv. I think it not unlikely however that $P$ is descended from $c$ through Pith. $P$ and $V^{3}$ both omit II. 716-17.
${ }^{4} F$, or some MS. closely akin to it, must have been employed by Regiomontanus and by the ed. Bon., as may be seen by comparing my App. Crit. with the citations from $F$ in Bechert.

## III

## MANILIUS AND HIS EDITORS

> 'Wolbt sich der Himmel nicht dadroben, Und steigen freundlich blickend Ewige Sterne nicht herauf?'-Goethe.

I have called this section Manilius and his Editors, and if there is rather more in it about the editors than about Manilius that is because the former are so numerous and of the latter so little is known. The very name of Manilius is not certain, and his generation who shall tell? Our earliest authorities for the name are Poggio ${ }^{1}$ and Francesco Barbaro, ${ }^{2}$ of whom the former speaks of ' $M$. Manilium Astromicon' ( $s i c$ ), the latter of 'Manilium Astronomum '. Consonant with this is the subscriptio ${ }^{3}$ to Book I in the Codex Matritensis, ' M. Manili Astronomi con ${ }^{4}$ (sic) Liber Primus Explicit.' But the same MS. has elsewhere ' M. Manlii Boeni', and again 'M. Milnili'. The Codex Gemblacensis, which has lost its titulus, gives no name in its subscriptions; while the Leipsic MS. assigns the poem to Aratus ('Arati Philosophi Astronomicon Liber Primus Incipit Prelibatio').

But a scholar who lived somewhat later than Poggio and Barbaro is perhaps a better witness than either to the name Manilius. Politian refers to the ancient codex of Manilius which he found in Padua ${ }^{5}$ as a MS. of ' M . Manilio astronomo e poeta antiquo'. It is no doubt an over-statement when Sabbadini says that this reference establishes the name with certainty. Yet it seems more than probable that Politian found this name

[^27]
## MANILIUS AND HIS EDITORS

M. Manilius in the titulus to his MS.-at any rate he says nothing which would discountenance such a supposition.

The ' M . Manlii Boeni' of $M$ has provoked a good deal of speculation. The name 'Boeni', in other MSS. of the Italian family, occurs as 'Boetii', and again as 'Poeni'. From the form ' Poeni' it has been conjectured that Manilius was a Carthaginian, and that this accounts for his bad Latin. The fact is that his Latin is extremely good (Kraemer ${ }^{1}$ justly remarks that no one has ever attempted to show in detail the 'Africitas' of Manilius' style), and that 'Poeni' is a bad emendation (as 'Boeti' is perhaps a good one) of 'Boeni'. A Carthaginian could not have written, to take only one example, anything so signally Roman in temper as the Exordium to Book IV. ${ }^{2}$ Bechert, ${ }^{3}$ in a single sentence, has truly appreciated this essentially Roman temper of Manilius: 'Quotienscunque enim poeta res Romanas tangit, dictio eius animum hominis uere Romani spirat.' And Manilius' temper is not merely Roman, but it is markedly anti-Carthaginian. Lanson ${ }^{4}$ in this connexion has aptly directed attention to IV. 112 sqq. It is a 'singularis ac nouus patriae amor', says Lanson, which can find nothing worthy of note in its native country save ' belluarum omne genus ac monstrorum'.
'Boetii' deserves a more civil consideration. The great Gerbert (Sylvester II), astronomer and humanist, writes to the monk Rainard for copies of 'M. Manlius de Astrologia'. 'Age ergo et te solo conscio tuis sumptibus fac ut mihi scribantur M. Manlius de astrologia, Victorinus (Victorius codd.) de Rhetorica, Demosthenes Ophthalmicum. ${ }^{5}$ In a letter, ${ }^{6}$ again, to Archbishop Adalberon, he speaks of 'viii uolumina Boetii de astrologia' which he had discovered. It has been conjectured that this Manlius and this Boetius of whom Gerbert speaks were one and the same person, and this person it has been sought to identify with our Manilius. This identification scholars as prudent

[^28]as Ellis ${ }^{1}$ and as hasty as Housman ${ }^{2}$ seem alike inclined to accept. Others understand Sylvester to be speaking in both passages of Anicius Manlius Torquatus Severinus Boetius, the author, that is, of the famous work On the Consolation of Philosophy. Now if we had only the reference in Sylvester to 'viii uolumina Boetii de astrologia' it is quite certain that no one would ever have dreamed of finding in it a reference to our Manilius. Of our Manilius we have to-day, after all, only five uolumina ; and the criticism which would identify these with the 'viii uolumina' of Sylvester would be too frankly Procrustean to be worth a serious consideration were it not for Sylvester's other reference to ' $M$. Manlius de Astrologia '. Sylvester, it is urged, ${ }^{3}$ could never have spoken of the author of the Consolation as 'Manlius': he must have said Boetius. I have elsewhere ${ }^{4}$ shown, as I think, conclusively that this is a false assumption. For Sylvester's pupil, Richer, uses 'Manlium' without qualification for 'Boetium'. And he so uses it in a passage ${ }^{5}$ in which he is actually describing a lecture of Sylvester's; and a passage ${ }^{5}$ again in which 'Manlius' is coupled with the very writer with whom Sylvester, in our letter, conjoins him-the rhetorician Victorinus. We can hardly doubt that, in describing Sylvester's lecture, Richer says 'Manlius' just because he had often heard the lecturer so speak of Boetius. ${ }^{6}$ Moreover, the fourteenth-century Sorbonne Catalogue, N. LIII. 9, has, as I have also pointed out elsewhere, 'Anicii Manlii', without the addition 'Boetii', for the author of the Consolation.

How, then, are we to explain the addition 'Boeti' after the name of Manilius in the MSS. of the Italian family ? It might seem that there was something to be said for the ingenious suggestion of Kraemer, that Boeti, Boeci, Poeni represent an original 'poetae clarissimi'. This description is added after the name of Manilius in several of those MSS. from which 'Boeti' is absent. 'Poetae clarissimi' was perhaps written in contracted form 'poe. cl.' -and this might have passed into 'Poeci' or the like. But against Kraemer it is to be urged that those MSS. which have this addition 'poetae clarissimi' seem all to be

[^29][^30]
## MANILIUS AND HIS EDITORS

dependent upon $M$, which has 'Boeni'; and if they are so, then Kraemer's suggestion is at once ruled out. It is possible that $M$ 's 'Boeni' is a blunder for 'Boeti'; and that, in the original of $M$, 'Boeti' had been added after 'Manili' by some one who wished to identify the author of the Astronomica with Anicius Manlius Torquatus Severinus Boetius. ${ }^{1}$

We know neither when Manilius was born nor when he died. He has always a tender regard for the Constellation Gemini. Those born under that sign
unum pectus habent fideique immobile uinclum,
magnus et in multos ueniet successus amicos (II. 630-2), and Manilius is always (cp. II. 58 r sqq.) peculiarly impressed by the beauty and rarity of human friendship. In III. 152-6I he tells us that under Gemini are born poets and astrologers, and as he elsewhere tells us that he was the first astrologer in poetry, we may without being over-fanciful infer that he was himself born under that constellation.

That he wrote under Augustus is certain, and that he survived Augustus at any rate by a little is, I think, nearly certain. I. 898-903 refers to the disaster of the Saltus Teutoburgiensis (A.D. 9), and with a certain detachment which suggests that that event, while not distant, was not of yesterday ; while the concluding lines of Book I show that Augustus was yet living (he died in A.D. 14). Nor is there any reason to suspect-with Breiter-the genuineness of I. 384-6, which also makes it clear that Augustus is living. I. 798-801:

Venerisque ab origine proles
Iulia descendit caelo caelumque repleuit, quod regit Augustus socio per signa Tonanti, cernit et in coetu diuum magnumque Quirinum
have caused some perplexity. In face of the other references to

[^31]
## INTRODUCTION III

Augustus in the same Book it is impossible to interpret these lines as implying that Augustus is dead. Ellis and others aptly compare Hor. C. iii. 3. Ir-12, 'quos inter Augustus recumbens purpureo bibit ore nectar'-where the variant bibet has tempted nobody-in which Augustus, still living, is figured as already sitting among the Gods. So Manilius here figures him already ruling the heaven as the partner in empire of Jove. (IV. 933-5, cited by Ellis, is more doubtful ; see below.) The corrections replebit, reget, cernet are intolerably flat. (In 8or for magnumque I would suggest agnouitque.)

From II. 507-8, where it is said that Capricorn beholds himself, 'for what nobler sight could he look upon since it was he that shone on the rising of Augustus?'-it is once again clear that Augustus is still living. Our real difficulties lie in Book IV, since III and V contain no indications of date. At IV. 243-8 we are told of Capricorn, Augustus' star, that he presides over the discovery and working of gold, silver, and iron, the baking of bread, the buying and selling of warm clothes, and that, from his position, he is the cause of instability in things and fluctuation of mind in men. The first clauses might pass for a not ungraceful reference to useful and beneficent works of Augustus, and the reference to instability and fluctuation, though it implies no compliment to Augustus, is-viewed as a hostile criticism-so strikingly untrue as to be silly. 'But of kings and Kesars,' says Mr. Housman, 'not a word.' Worse yet, in 529 sq. we have 'Veneri mixto cum crimine seruit pars prior, at melior iuncto sub pisce senecta est': 'these words, with their spice of truth and personality, were hardly written of Augustus' star in Augustus' lifetime.' This is ingeniously argued, and perhaps truly, ${ }^{1}$ though it would be possible in 'Veneri mixto cum crimine seruit,' \&c., to see a reference to Julia; nor was it easy for Manilius in speaking of the caper side of Capricorn to avoid allusion to the propensity of capri for Veneris crimina: yet 'at melior . . . senecta' is a poor apology to Augustus.
' Instead of Capricorn it is now Libra that assumes the primacy of heaven' (Housman). This is undeniably true. But Mr. Housman proceeds to argue: Capricorn and not Libra was the

[^32]1xii

## MANILIUS AND HIS EDITORS

'star' of Augustus; Libra was the 'star' of Tiberius ; therefore, when Manilius praises Libra, Augustus is dead. Now
(I) It is not certain that Libra was the 'star' of Tiberius.
(2) It is possible that both Capricorn and Libra were the 'stars' of Augustus, Capricorn the star of his conception, Libra of his birth; see Commentary on II. 507. Turn, then, to IV. 203-16: there Libra is described as the source of order, measure, law, and justice, and the passage concludes:
denique in ambiguo fuerit quodcumque locatum et rectoris egens, diriment examina Librae.
Is this an apology to Augustus for the

> hinc et mobilitas rerum, mutataque saepe mens natat,
which occurs in the description, just noticed, of Capricorn (IV. 256-7)? Does Manilius mean to say that, whatever is ambiguum in Capricorn = Augustus, is set right in Libra $=$ Augustus, and therefore does not matter? Or does he mean to say that the faults of Augustus no longer matter since we now live under the virtues of Libra $=$ Tiberius ?

In this same description of Libra we are told (IV. 2 I I) that he that is born under that sign
et licitum sciet et uetitum quae poena sequatur.
The last words, if we are looking for a 'spice of truth and personality', might be a veiled satirical reference to the system of delatio inaugurated by Tiberius. On the other hand, if Tiberius was likely to look in Manilius' description of Libra for a portrait of himself, this satire would perhaps not have been sufficiently veiled.
IV. $772-7$ helps us but little, for the text of 776 is uncertain, even if the line is not wholly spurious. (With Mr. Housman's emendation, Augustus, surely, would far more fitly than Tiberius be termed the second founder of Rome; and, indeed, we are told by Suetonius (apud Seruium Aen. i. 292, Georg. iii. 27) that Augustus at one time had thoughts of assuming the name Quirinus.)

The view that Tiberius was princeps when Book IV was written finds its strongest support in $764-6$, where the island of Rhodes (in which Tiberius spent some gloomy years) is described as
hospitium recturi principis orbem, tumque domus uere Solis, cui tota sacrata est, cum caperet lumen magni sub Caesare mundi.

1xiii

## INTRODUCTION III

The last line can only mean, I think, 'when it received the light of the world in the person of Caesar,' i. e. Tiberius Caesar. And in that case Tiberius was emperor when the line was written.

Of the last verses of Book IV
ne dubites homini diuinos credere uultus, iam facis ipse deos mittisque ad sidera numen maius et Augusto crescet sub principe caelum
Mr. Housman says dogmatically that 'they prove nothing either way'. Why, none of these passages-save perhaps 764-6-by themselves prove anything either way. The proof is cumulative. But these concluding lines of Book IV have their importance. If 764-6 show that Augustus was already dead, 933-5 show that he was only just dead. On any other assumption 'Augusto sub principe' is inexplicable ; nor is it likely that, if Augustus had been in his grave for any length of time, Manilius would have gone out of his way to pay him an elaborate compliment which might very well have offended Tiberius.

Books I-II, then, were written between A.D. 9 and A.D. I4. Book IV was finished probably in A. D. 14-15.

In A. D. 16 occurred an event which must have had an important effect upon Manilius' studies and have greatly influenced the fortunes of his poem. This was the conspiracy of Libo Drusus. The prophecies of 'Chaldean' astrologers (the two principal persons among them bore Roman names) were supposed to have incited Libo Drusus to treason against the Emperor, and the discovery of this conspiracy put a rude check upon the progress of astrological science. A senate servile and alarmed, which desired prophets who should prophesy only good things, outlawed the whole body of mathematici. ${ }^{1}$ This edict of A.D. $16^{2}$ is the most natural explanation of the condition of Manilius' poem as we have it, of its inconsistencies, its occasional incoherence, the traces in it everywhere of want of finish. But if this is so, it seems probable that Manilius did not long survive the edict which had thus interrupted his studies. For it would appear from Suetonius ${ }^{3}$ that the edict was rescinded shortly after its promulgation. It was just one of several edicts such as, appearing in a fitful series under the early empire, provoked Tacitus to

[^33]
## MANILIUS AND HIS EDITORS

the scornful epigram which he hurls at astrologers and their persecutors-'genus hominum potentibus infidum, sperantibus fallax, quod in ciuitate nostra et uetabitur semper et retinebitur.'

This will be a suitable place for saying something of the fortunes of astrology generally in the Roman world, and of the repute, in different periods, of its practitioners. Astrology found its way to the West along the route of Alexander's conquests. (The contention that Plato, at an earlier date, shows some knowledge of its principles is at least doubtful ; and in any case as a recognized profession astrology is first found in Greece about the beginning of the third century.) It came to Rome from Greece as a part of the great Hellenizing movement which followed upon the Hannibalian War. By the beginning of the second century it was already enjoying there a considerable vogue. The great adversary of the invading Hellenism of this period, M. Porcius Cato, ${ }^{1}$ thought it necessary to forbid his uilicus all resort to haruspicem, augurem, hariolum Chaldaeum. In 139 b. c. the Praetor Peregrinus, Cn. Cornelius Hispalus, expelled from Italy by edict all astrologers. ${ }^{2}$ But the time for such edicts was already passed. Astrology had found in the Stoic philosophy an ally more powerful than any magisterial power. Cicero ${ }^{3}$ tells us that the great Stoic philosopher Panaetius (who died about iri b.c.) considered that, save for two of his friends, he was alone among the Stoics in rejecting the claim of astrology to be a science. His chief contemporariesAnchialus, Cassander, Scylax-were all believers, and the influence of Panaetius was as powerless as the edict of Hispalus to keep out of Rome either the theory or the practice of astrology. Plutarch ${ }^{4}$ tells us that when Cn. Octavius was killed by the
 And the long period of the revolution from the Gracchi to Caesar-promoting as it did by its frequent and sudden 'reversals of fortune' the belief in an ungovernable destiny, a faith in the 'star' of individual great men-found for the astrologer friends among the politicians. We read of 'oracles' given to Gracchus, Sulla, Pompey, Crassus, Caesar. It was in

[^34]
## INTRODUCTION III

the Sullan period that there came to Rome Manilius Antiochusto us a mere name, but undoubtedly a personality of wide influence, for Pliny ${ }^{1}$ speaks of him as 'conditor astrologiae'. But much more important, a generation later, was the advent of Posidonius. A pupil of Panaetius, Posidonius came to Rome in 51 B.c.-his influence was, of course, felt there much earlier. St. Augustine ${ }^{2}$ speaks of him as 'fatalium siderum assertor'; and if Panaetius had done anything to arrest the vogue of astrology, Posidonius more than redressed the balance. He left an influence powerfully operative a century after his death. To him was due the final victory of the Stoicism of the Principate over the fashionable Epicureanism of the Republican period-a triumph which was at the same time the triumph of astrology. Other conditions also favoured the astrologer. Manilius, in the Exordium to the fourth book, describes Julius Caesar as holding in his hand, and staining with his lifeblood, as he fell, the document which contained the prediction of his death :
totiens praedicta cauere
uulnera non potuit toto spectante senatu indicium dextra retinens nomenque ${ }^{3}$ cruore deleuit proprio, possent ut uincere fata.
Astrology is the natural ally of hereditary power. On the day upon which Augustus was born, Nigidius Figulus, ${ }^{4}$ an astrologer and a prominent senator, predicted in the senate his future great-ness-dominum terrarum orbi natum. Augustus' own interest in astrology is sufficiently attested even by such gossip as Suetonius' story of his adventure with Theagenes. ${ }^{5}$ That he used the astrologers to his own ends is, perhaps, true. On the other hand, astrology was by this time one of the recognized $\dot{\epsilon} \pi \iota \sigma \tau \hat{\eta} \mu \alpha \iota$. It had for its patrons men of learning such as Nigidius ${ }^{6}$ and Varro, ${ }^{7}$ and it was responding to the kindly influences that had thus gathered about it. The astrologer glozing over the more fantastic features of his system, and emphasizing its connexion

[^35]
## MANILIUS AND HIS EDITORS

with mathematics, was endeavouring to accommodate his principles to those of the natural sciences. ${ }^{1}$ Augustus himself, therefore, ever forward to assist the advance of knowledge or of art, was likely enough to be not unfriendly disposed to the mathematici. He was not perhaps a man of great imagination; but the poetry of the stars is impressive to the imaginative and to the unimaginative alike. His mind, moreover, was tinged with that contented fatalism which so often characterizes men whom fortune has called from a private station to supreme power. The Exordium to the first book of the Astronomica 'gives the glory' to Augustus. The poem is his as much as the Aeneid is his, or the Georgics Maecenas'. He is the 'author and begetter'. What wonder that his star should shine so bright that it marvels at its own brilliancy?

But it was hardly without Augustus' contrivance that in 33 B. C. Agrippa, ${ }^{2}$ as aedile, expelled from Rome 'the astrologers and
 ésj̀ $\lambda a \sigma \in v$ ). But it would be wrong, I think, to regard this edict as directed either against astrologers as such or against all astrologers. It is most natural to connect it with the activity of Antony during this year in Media and the East. It touched not Roman astrologers (such as those who suffered under the edict of A. D. 16 ; see above, p. lxiv), but the Oriental $\mu$ ároc. It may even be doubted whether astrology as such was not too powerful an organization for Augustus to offend. Religion, literature, and popular thought were all by this time deeply imbued with astrological doctrine. The influence of astrology upon religion was notable in two respects: (1) A rapprochement had taken place between the mathematici and the Etruscan haruspices. Nigidius represents the two arts in their combination. ${ }^{3}$ (2) From this period onward 'catasterism' becomes the form under which human immortality is ordinarily conceived. Still stronger was the hold which astrology had upon literature and popular thought. One might appeal here to Virgil himself-to the 'star of Dionaean Caesar' in the ninth Eclogue, to the (largely astrological) doctrine of $\dot{\text { úтокала́бтабıs in }}$ the fourth-but Virgil stands too much out

[^36]
## INTRODUCTION III

side the popular thought of the time. Nearer to our purpose are Horace and Propertius.

> Seu Libra seu me Scorpios aspicit formidolosus, pars uiolentior natalis horae, seu tyrannus Hesperiae Capricornus undae, utrumque nostrum incredibili modo consentit astrum : te Iouis impio tutela Saturno refulgens eripuit.

So Horace to Maecenas-and we must suppose his astrology to have been intelligible not only to Maecenas but to the general reader. Less elaborate, but hardly less instructive, is the language of $E_{p p}$. ii. 2. 187, 'scit Genius, natale comes qui temperat astrum.' ${ }^{1}$ Elsewhere he ${ }^{2}$ speaks of essaying 'Babylonios numeros', in a manner which implies that such appeals to the astrologer's art were familiar and understood. But the knowledge of astrological practice demanded by Horace of his readers is as nothing compared with that postulated by Propertius in the first elegy of the fourth book. A good deal of that poem (75-86, $107-8$ ) is still obscure to students of astrology; and the whole poem in its conception, as well as in its detail, implies in the average Roman a considerable interest in, and knowledge of, the methods of astrologers. Parts of the Ibis, again, of Ovid, and much of the Metamorphoses, point the same lesson. In fact the whole literature of the period bears witness to the immense fascination which the mysteries of astrology exercised upon the mind of the average cultivated Roman.

Tiberius, like Augustus, was no enemy of astrology. In Thrasyllus he had his Theagenes-and more so. ${ }^{3}$ Yet, surrounded 'cum grege Chaldaeo', ${ }^{4}$ he none the less had that peevish mistrust in his destiny which frequently afflicts men whose greatness is inherited. But the edict of A. D. 16 was not to his liking. 'Expulit et mathematicos,' says Suetonius ${ }^{\text {B }}$ - apparently with reference to this edict-'sed deprecantibus ac se artem desituros promittentibus ueniam dedit.' The astrologers

[^37]
## MANILIUS AND HIS EDITORS

soon came back again. It would seem, in fact, that neither under the Republic nor under the first two Emperors did their science ever meet serious molestation. There were always of course worthless 'Isiaci coniectores' and 'astrologi de circo', just as always every science or art has its charlatans; and these did something to discredit astrology as a whole. But the science seems mostly to have commanded a fair treatment and to have attracted, on the part of thoughtful men, at least a tolerant curiosity. Under the Republic it hit an occasional vogue without perhaps securing (until near the close of the period) a permanent respectability. Under the early Principate it enjoyed, through Stoicism, the favour of most that was respectable, as well as of much that was fanatical, in Rome. It could never, of course, be wholly exempt from such persecutions as the brutal and timid inflict fitfully upon the wise. Tacitus, as we have seen, speaks now and again contemptuously or wrathfully of the pretension or iniquity of the astrologers. Yet he has bequeathed to us, in a chapter ${ }^{1}$ of valuable digression, a dignified and impressive summary of his more deliberated reflections upon this art. 'My judgement wavers,' he says: 'I dare not say whether it be fate and necessity immutable which governs the changing course of human affairs-or just chance. Among the wisest of the ancients, as well as among their apes, you will find a conflict of opinion. Many hold fixedly the view that our beginning and our endthat man himself-is nothing to the Gods at all. The wicked are in prosperity and the good meet tribulation. Others believe that Fate and the facts of this world work together. But this connexion they trace not to planetary influences but to a concatenation of natural causes. We choose our life-that is free : but the choice once made, what awaits us is fixed and ordered. Good and evil are different from the vulgar opinion of them: Often those who seem to battle with adversity are to be accounted blessed ; but the many even in their prosperity are miserable. It needs only to bear misfortune bravely, while the fool perishes in his wealth. Outside these rival schools stands the man in the street. No one will take from him his conviction that at our birth are fixed for us the things that shall be. If some things fall out differently from what was foretold, that is due to the deceit of men that speak what they know not: calling into

[^38]
## INTRODUCTION III

contempt a science to which the past and the present alike bear a glorious testimony.'

The passage has the eloquence of a certain pathetic hesitancy. And this hesitancy is probably typical of many of the best minds, not only of the Tacitean period, but of the whole period of the early Principate. These hesitant sentences of Tacitus are the best commentary that we could have upon the whole spirit of the Astronomica. It is this hesitancy which is the opportunity of Manilius. He flings himself upon it in an ardour of absolute personal conviction. The last of the poets to feel the impulsion of the furor arduus of philosophic speculation, he addresses himself with arresting insistency to men in whom the age-long fact of social and moral confusion had wellnigh killed faith in an order of the universe. It is true that many parts of his poem reflect the unrest and bewilderment of the times in which he lived. He does not wholly escape the infections of his age. He inherits, like his contemporaries, the shaken nerves of the Civil War. ${ }^{1}$ On the other hand he has, as his contemporaries have not, an unconquerable conviction of the paramountcy of Reason; and this conviction, informing every line of his poem, makes that poem for us somewhat of a literary paradox. We had heard of an astrologer, and we looked for a quack or an imbecile. Yet the most striking impressions that we receive from the reading of the Astronomica are undoubtedly those of a rare purity of mind in its author and a singular freedom from superstition. Indeed, in his signal detachment from superstition, and in the lofty expression which he gives to this freedom, Manilius is the peer of Lucretius. Reason, he tells us, has ascended into heaven, soluitque animis miracula rerum eripuitque Ioui fulmen uiresque Tonanti (I. 103-4):
it has freed thè human mind from empty fears and interpreted natural phenomena as such. God, it is true, is in all these phenomena, but not any god of pagan mythology: rather that God who is reason and spirit and law (II. 60 sqq.). 'For I will sing of the silent strong workings of nature, and of God interfused in earth and sky and sea controlling in impartial covenant the mighty mass of things. I will sing how the whole universe is alive with harmony upon this side and upon that, and is moved by the motions of Reason, one spirit indwelling in all its parts,

[^39]
## MANILIUS AND HIS EDITORS

shedding its dews upon the round world, swiftly speeding through all things, and fashioning the body of things to breathing life. ${ }^{1}$ This God, again, who pervades all the phenomena of nature, this Reason that makes the world one, dwells also in man. It is just because he does so that astrology exists at all. 'God hath descended into man, and in man's seeking of him seeks himself.' ${ }^{3}$ Nay, man is a part of God-he seeks the heavens whence he came:

> Quis caelum posset nisi caeli munere nosse et reperire deum nisi qui pars ipse deorum est?

These ideas are, of course, the commonplaces of Stoicism. But they are commonplaces which Manilius touches to fine issues. They have as he utters them the note of a personal religion. As we read them it is impossible for us any longer to think of Manilius and his friends as 'the devotees of a dying superstition'. Far rather we must conceive of them as students who, amid the disorders of a corrupt society, in the collapse of religion and morals, sought to turn the eyes of men to the contemplation of what they believed to be the law and harmony and order of a divine reason. Kant, finding two things in the world still for ever wonderful'the starry heavens above and the moral law within'-is far nearer to Manilius than a Galeotti battening on the superstition of kings.

It is constantly charged against Manilius that he has only the most defective knowledge of his subject-that by countless astrological blunders he stands a convicted 'dilettante'. This is an opinion which is apt, I think, to take exaggerated expression. Huet, who was competent in astronomy, accepts it as to some extent true. He adds, however, and properly: 'Excusandus tamen Manilius, imo laudandus etiam, quod res Romanis auribus inauditas primus scriptis tradere et metris quoque adstringere instituerit. . . . Nam etsi rerum huiusmodi consultis indoctior habendus est, at imperitis Romanis cum scriberet eruditus videri potuit' (p. 86). We cannot expect a writer who deals in a completely untried material to stand wholly above the limitations of his surroundings. Amid the general ignorance of his contemporaries he is left without a tradition, and to a great extent without a standard, and cannot possibly attain that exactitude which is bred in an environment of discussion and criticism. Errors which

[^40]
## INTRODUCTION III

would be inexcusable in a Greek are not necessarily in a Roman sufficient to sustain against him the charge of dilettantism. Moreover, many of the errors which we lay at the door of Manilius are pretty certainly to be attributed to the badness of our MSS. Others again are no doubt due to the circumstance that the Astronomica has come down to us in an obviously unfinished condition. ${ }^{1}$

The problem raised by the incomplete character of the poem is a rather complex one, but I cannot here pass it by without some discussion. It has been held that the poem is, as we have it, incomplete because, as we have it, it is less than what Manilius wrote: that a large portion of it, in fact, has been lost. In various parts of his work Manilius makes promises which in the work, as it has descended to us, are never fulfilled. In particular, he promises repeatedly some account of the influences of the planets; and the Mathesis of Firmicus, who follows Manilius so closely, is principally concerned with planetary astrology. The argument from Firmicus must, I think, not be pressed: he had after all other authorities than Manilius (however closely, in certain parts, he follows Manilius ${ }^{2}$ ). The strength of the hypothesis that a large portion of the poem has been lost lies in the conjunction of two facts. The first is that, as I say, Manilius promises a full treatment of the mixtura of planets and signs (cp. e.g. II. 749 sqq.) ; ${ }^{3}$ and the second, that in the opening lines of Book V (omitting vv. 5-7) he speaks as though the actual scheme of his work (save for the appendix which Book V constitutes) had already reached completion. Do these facts admit of any other explanation than that a large portion of the Astronomica has been lost? I fancy that they perhaps do. I am inclined to find the explanation of them in the edict of A. D. 16 of which I have already spoken. That edict was directed against astrology as a practiceable art. It was directed against astrology in so far as astrology enables us to cast a horoscope. You can cast no horoscope if you do not allow for the mixtura of planets and signs in their influences. Consequently you cannot cast a horoscope by the

[^41]
## MANILIUS AND HIS EDITORS

aid of Manilius' poem as we possess it. Consequently the Astronomica is an entirely harmless composition. The sting of astrology is the planets. The Astronomica is astrology without its sting. The Scorpion has hidden his claws under Libra or political prudence. In other words, I suppose Manilius to have begun his poem-indeed to have proceeded some way with it-in the full intention of expounding in detail the influence of the planets. After the edict of A. D. 16 he deliberately finished it off without this exposition. Indications of the larger primary conception remain standing because, though in one sense the poem was finished, in another sense it was not. Manilius finished his poem in so far as to complete a rough draft of the whole. He did not finish it in so far as he never went through it to remove its minor blemishes and inconsistencies.

This view-which is of course provisional only-fits in with the fact that Manilius is so much neglected both before and after the Middle Ages. ${ }^{1}$ One is inclined to explain this neglect by saying that he is hard and dull. He is hard and dull to most persons to-day. But that is because most persons to-day have little knowledge of, and no interest in, astrology. But the men of the first five centuries, and again of the fifteenth and sixteenth centuries, were made differently. To them astrology was interesting and respectable. It was just because Manilius did not deal with the planets, because he does not help any one to cast a horoscope, because, that is, he wrote five ${ }^{2}$ books and not 'viii uolumina' or any other number, that he was so long so utterly neglected.

The Astronomica, then, never received its author's ultima manus. It remains a rather incoherent composition, often obscure alike in thought and diction. Yet, despite its many blemishes, it is a poem not altogether unworthy in style and tone of a place beside the greater literary monuments of the Augustan age. For a genuine vein of poetry runs all through it-in a rather broken thread no doubt. Moral elevation alone perhaps cannot make

[^42]
## INTRODUCTION III

a poet, though sometimes it seems to. Nor can mere grace, mere charm. Manilius has a moral elevation, a pure intensity of philosophic feeling, which places him by the side of Lucretius. And he has in addition a grace and charm, a fluency and limpidity of style, which brings him near to Ovid. ${ }^{1}$ The Lucretian and the Ovidian manners in him are not of course equably fused, nor is such a fusion possible; nor, indeed, is the poem of Manilius as a whole a fused or even work. The greatest passages in the poem are those in which the Lucretian manner triumphs over the Ovidian ; for the latter, or something like it, is Manilius' normal manner. Even in these passages a certain affectation, a love of the antithetic, a straining after 'point', reminds us that an imperial language has already submitted itself to mere cleverness; though perhaps it does not seem to us, as it seems to us always when reading Ovid, that the author himself is trying to be clever. But if Manilius is a great poet by his Lucretian passages, he is none the less at his more normal level mostly pleasing and graceful. The purity of his Latin style, though some critics have found his accents Punic, has been admitted by most scholars. And in numberless passages of the fourth and fifth books, where there is no great intensity of feeling, where the writing is removed from all suspicion of greatness, Manilius has an ease and grace and clearness quite admirable and in some respects unique. If it is the Lucretian hair-shirt showing out beneath the Ovidian fine clothes which touches us most nearly, yet the fine clothes (and they are less fine than Ovid's, after all, more simply carried, and with fewer ribbons and bows) are well worth observation. Or to put all this differently, every now and again we get from Manilius really great literature, and very frequently the sort of literature which may be called the ne plus ultra of 'pleasant reading'.'

But it is beside my purpose to speak here either of the philosophy or of the style of Manilius. I have only said so much in order to show how a poem, of which the subject is to modern ideas so repellent and vain, may yet be worth study. And indeed, though students of Manilius are few, not many Latin poets have been thought worth study by so many scholars of eminent talents.

[^43]
## MANILIUS AND HIS EDITORS

Few have attracted the abilities of such great editors. It is not too much to say that Manilius will always be read, not only for his own virtues, but for those of the scholars who have busied themselves with him. Of the work of some of these I may be allowed here within the limits of my knowledge to attempt some estimate. I feel the more induced to do this since an exacting and lively critic has recently passed the work of all of them under review, with a good deal of extravagance of judgement, and in some cases with a perverse injustice.

The earliest of the printed editions of Manilius is now generally agreed to be that of Regiomontanus, or-to give him his modern name-Johann Mueller of Königsberg, the pupil of Purbach and the foremost astronomer of the fifteenth century. I have elsewhere ${ }^{1}$ made some conjecture as to the circumstances under which this edition was executed or conceived. To what I have there said I have here little to add. The edition of Regiomontanus belongs probably to the year 1474. In that year died Janus Pannonius, one of the circle of Hungarian humanists with whom Regiomontanus was connected. Among the friends of Janus Pannonius was Marsiglio Ficino (who dedicated to him his translation of Plato's Symposium). Not only was Ficino himself an astrologer (he had translated in 1463 the Hermes Trismegistus), but he was an intimate friend of the first commentator upon Manilius-Bonincontrius. ${ }^{2}$ This indirect connexion between the first editor and the first expositor of Manilius is, I think, not without interest for Manilian students. Regiomontanus seems to have taken rather lightly the duty of preparing the first printed text of our author. I know the Florentine MS. Laur. plut. 13, 15 only from the citations from it in Bechert's text. But I should not be surprised to find, from a fuller knowledge of it, that Regiomontanus' text is (save for a good many crude, and one or two clever, conjectures ${ }^{3}$ ) substantially the same as that of the Laurentianus. In any case this edition is not only unscholarly, but it is a work discreditable to a man of any gifts, conscience, or reputation.

And the same is true of the edition which was long regarded as the editio princeps-the Bononiensis. Cramer is probably right

[^44]
## INTRODUCTION III

when he says that the editor of the Bononiensis cannot have seen the work of Regiomontanus. Yet the basis of the two texts is the same, and I suspect that there is nothing which they have in common which is not in the Laurentianus. I should conjecture that the Bologna editor actually had the Florentine MS. before him, and that Regiomontanus employed a Hungarian brother of it : that Regiomontanus used one MS. and (sparingly) his wits, and the Bologna editor more than one MS. but not his witsor they were poor wits. The ed. Bononiensis is assigned by Muratori loc. cit. to Bonincontrius, and this attribution may be found also in Fabricius. It is first called in question, so far as I know, by Saxius in his Onomasticon Litterarium, ii, pp. 457-8. Manilian scholars have, however, one and all rejected the opinion of Muratori and embraced that of Saxius. On what grounds they have done this I have no means of discovering; nor am I competent to treat the question. I would, however, offer two observations: (1) Muratori was acquainted with relatives of Bonincontrius, and had access to Bonincontrius' papers. He was, therefore, in a position to know. (2) It seems to me likely that Scaliger attributed the ed. Bononiensis to Bonincontrius, when, in his first edition, ${ }^{1}$ he wrote 'aiunt Bonincontrium quendam in hunc poetam commentarios edidisse . . . quid ipse in hunc poetam boni edere potuerit non uideo qui tot mendis inquinatum eum nobis reliquerit': and he goes on to say that if he had the Commentary before him he would probably find that the monstrous faults of the Manilian vulgate were the product of Bonincontrius' inventive faculty. I can find no meaning in all this unless Scaliger regarded some one or other of the printed texts (prior to 1484) as the work of Bonincontrius. (3) The text of Bonincontrius' edition is in the main that of ed. Bononiensis, distinguished from it only by its greater wealth of conjecture. For the fifteenthcentury editions, like the MSS., of Manilius fall into two distinct families, which I have distinguished ${ }^{2}$ as $e$ and $\epsilon_{0} \quad e$ consists of Regiomontanus, the first Naples edition (1475), the edition in quarto ${ }^{3}$ sine loco et anno, and the second ${ }^{4}$ Naples edition (1475-

[^45]lxxvi

## MANILIUS AND HIS EDITORS

80). є consists of ed. Bononiensis, Bonincontrius, Dulcinius ( 1489 ), and the first Aldine (1499). (To the same group belong in the next century ed. Rom., Prückner, Molinius.) The first Naples edition is not much better than a reprint of Regiomontanus, embodying a certain number of corrections derived from ed. Bononiensis. Its chief importance is that through it the text of Regiomontanus was propagated into texts whose editors did not have direct access to the editio princeps. The quarto edition sine loco et anno follows very closely the first Neapolitan, but again and again crosses over into the $\epsilon$ tradition. The editor may be allowed to possess more judgement than any of his three predecessors. ${ }^{1}$ Once or twice he gives us what I take to be a true conjectural emendation, e.g. II. 334 'partibus aut trinis'.

But Regiomontanus, ed. Bononiensis, the Naples editions, the sine loco et anno are, when all is said and done, alike bad and dull. A little life and colour comes into the editing of Manilius first with Bonincontrius ( r 484 ). Judged by any reasonable standard even this edition is an incompetent work. Scaliger is not too severe upon the faults of Bonincontrius. Yet, after all, this muddled and superstitious man is the first editor of Manilius who appears in any degree, I will not say rational but, human. Little as we know of him, his personality is not uninteresting; and his writings are, at any rate, some expression of himself. He was born in 1410 at San Miniato, of an ancient family, which had sustained some part in Florentine affairs. As a young man he became mixed up in some treasonable negotiations with the Emperor Sigismund, and was banished from his native city. Later he saw some dangerous soldiering under Francesco Sforza, Duke of Milan, and the last three decades of a long life (he died not long after 1494-the date of his Fasti) he spent as astrologer-in-ordinary at the Court of Naples. He is drawn to Manilius by his own experience, through a life of many vicissitudes, of the truth of the stars. Commenting upon II. 872 he writes: 'praeceps] agit homines in praecipitium : expertus loquor qui habui Martem in hac domo et amisi omnia bona et patriam, exulque xlv annis aberraui a Miniati oppido.' ${ }^{2}$ And again, II. 885 : 'quod ego sum

[^46]
## INTRODUCTION III

expertus in Raphaele ${ }^{1}$ Cardinali Sancti Georgii, qui ad Cardinalatum uenit, et forte ad Pontificatum, cum directo illius stellae ad gradum decime, peruenerit.' He tells us, in the Preface to his Commentary, that he was the first scholar in Italy who lectured upon Manilius ; and he twice assures us that his lectures were attended by large and enthusiastic audiences. The Commentary was published in the year 1484 ; and, save for the Fasti (Rome, 1491), it was the only work of Bonincontrius which appeared during his lifetime. The Fasti is a small volume of verse in which Sapphics alternate with Elegiacs, and the Christian religion becomes inextricably mixed with the pagan mythology of the stars. Some of the verse is not without grace, but there is no approach to real accomplishment, nor are the pieces metrically faultless. ${ }^{2}$ But Bonincontrius' most notable work is the long hexameter poem Rerum Naturalium et Diuinarum siue de Rebus Caelestibus. Its editor, L. Gauricus ${ }^{3}$ (himself an astrologer), speaks of it as 'paene diuinum opusculum' (p. i), and Ficino calls its author, elegantly, 'poeta astronomicus astronomusque poeticus'. The elder Scaliger, whose son so much despised Bonincontrius, allows to the poem some merits. ${ }^{4}$ The student of Manilius may still be interested to glance through it and to observe the degree to which Bonincontrius has conserved, or transformed, the language and ideas of Manilius. ${ }^{5}$ In prose Bonincontrius wrote-in the annalistic style-a History of Florence and a work De Ortu Neapolitanorum Regum, both published posthumously. More interesting to Manilian students is a small astrological handbook, entitled Tractatus Electionum, forming a part of the Opusculum Astrologicum of Johann Schoner of Karlstadt, published at Nuremberg in 1539. This and his two poetical works help to explain both the defects and the merits, such as they are, of Bonincontrius' Commentary. Like de l'Isle,

[^47]lxxviii

## MANILIUS AND HIS EDITORS

the ' patronus-cliens Lucani', Bonincontrius understood the astrology of Holywood, ${ }^{1}$ but not that of Manilius. How idle it is to attempt thus to interpret the Rome of Augustus by the Oxford and Paris of the thirteenth century no one needs to be told who has read Scaliger ; and, as an exposition of the meaning of Manilius, Bonincontrius' work is an idle undertaking. Yet it is a work to which, on other grounds, some merits may be freely allowed. I will specify here three merits: (r) the Commentary is informed by a certain humanity-even in its superstition; (2) it contains a large number of illustrations of Manilius' language drawn from other poets-notably Ovid, of whom Bonincontrius has a good knowledge ; (3) it contains not a few ingenious (and one or two true) emendations.

I should add that the Codex Cassinensis which Bonincontrius professes to have employed (in which the poem was ascribed to 'C. Manilius ${ }^{\prime 2}$ ) perhaps never existed. If it did it was perhaps Cod. Vat. $3099\left(r^{2}\right)$. At any rate, no other extant MS. adds, as does $r^{2}$ (and as, according to Bonincontrius, did Cassinensis), the words 'poetae illustris' after Manilius' name. I would call attention also to the fact that Cardinal Riario, to whom the Commentary is dedicated, was Abbot of Monte Cassino. ${ }^{3}$

Five years after Bonincontrius came the text of Dulcinius (Milan, 1489). Dulcinius brought to the revision of the text one new MS., and Cramer finds in his edition about 150 new readings. I have consulted this text with some care, and traced to it not a few true corrections. This editor and Bonincontrius (who deeply influenced him) alone of Manilian students prior to Scaliger show any vigour and independence of mind. ${ }^{4}$
${ }^{1}$ Scaliger, Opuscula Varia, Paris, 1610, pp. 362, 370 ; cf. Scaligeriana (1658), p. 214 ' Manilium nullus fuit qui possit intelligere sicut ego : non enim describit Astronomiam hodiernam sed ueterem' ; and Opusc. Var., p. 5 I9.
${ }^{2}$ Not L. Manilius, as Sabbadini, Stud. Ital. di Phil. Class. ii, p. 1 Io.
${ }^{3}$ I take the opportunity here of correcting an error in Cramer (Die ältesten Ausgaben von Manilius' 'Astronomica', 1893); I. 38-9 are printed and not, as Cramer says, written in the text. On the other hand I. 16-17 are written; and it is clear from the arrangement of the type that they had been altogether omitted, no space being left. Cramer's doubt, p. II, about imaginibus is resolved by the Bodleian copy, which has imaginib', without trace of any erasure.

4 In his Praefatio, p. 5, Dulcinius characterizes the style of Manilius justly : 'Elegans omnino est : et, quantum Hypothesis patitur, in uerbis et sententiis figuratus, et ad Heroici poematis sublimitatem persaepe assurgens.。

## INTRODUCTION III

Dulcinius hands on the influence of Bonincontrius (and of the Bologna edition) to Aldus Manutius. Aldus' edition(Venice, 1499 -reprinted at Reggio in Lombardy, 1503 ), though Mr. Housman praises it as possessing 'character of its own' (p. xiii), has, so far as my examination of it goes (Book II), less individuality (apart from its beautiful type) than any text that I have looked at. Where it differs from Dulcinius it differs for the worse. Its real importance consists in the fact that it arrested Manilian criticism for nearly a century. Its large and beautiful type satisfied the eye and lulled to sleep the critical conscience. The Roman edition of 15 10, Pruckner 1533 and 1551, and the miniature text of Antonius Molinius ${ }^{1}$ ( ${ }^{5} 55$ I and ${ }^{1561}$ ), are all content to reproduce the Aldine with very little alteration.
'Itaque uides paucis datum esse in his literis sapere. Frustra labor et uigiliae operas contribuunt nisi ab ingenio adiuuentur.' So Scaliger, in one of his letters, ${ }^{2}$ sums up not unfairly the achievement of his predecessors (and contemporaries) in Manilian study. The name of Scaliger still seems to stand, as it stood to Dan. Heinsius ${ }^{3}$ when Scaliger died, not for some one learned man, but for learning itself. And his editions of Manilius are magnificent monuments of his erudition, of the vigour and freshness of his mind, of his untiring research, of his swift penetration. The text of Manilius which he had to work with when he began was not much superior to that furnished by an average Renascence MS. Editors had done little, and they had done much of it badly. With no good MS. to help him Scaliger set himself to create a readable text. His sense for Latinity, if we compare him with an intuitive Latinist like N. Heinsius, was defective. ${ }^{4}$

[^48]
## MANILIUS AND HIS EDITORS

But he possessed, what was above all needed for re-ordering the text of Manilius, a power of trenchant thinking which detected unreason where it was obvious and insisted everywhere on tolerable sense and consistency. As a consequence Scaliger noted at once the existence at several points in the text of transpositions affecting whole passages. ${ }^{1}$ What a sober man must have made of Book I before Scaliger rearranged the transposed portions it is difficult to imagine ; for Bonincontrius in these passages is not like a sober man. ${ }^{2}$ These things Scaliger set in order ; and at the same time, by his strong sense for what was rational, he was able in innumerable places to correct single words and whole lines in the text with a $\pi \epsilon \theta a v a ́ \gamma \kappa \eta$ which has never been surpassed by more elegant scholars. Auratus, in an epigram at the beginning of Scaliger's first edition (1579), calls the Manilius 'Herculeum opus'; and indeed Scaliger rid the land of monsters. ${ }^{3}$ Many of his emendations of course are blundering, some incredible. Yet no editor has in any one author so often replaced the false by the true, and it is no idle boast when on the title page of the second edition he speaks of the text as 'infinitis mendis repurgatum'. Scaliger had acquired also a vast knowledge of the ancient literature relevant to the subject of the Astronomica-much of it then unedited. This he turned to the very best account, and the pages of his Commentary are infinitely richer than those of any other editor in wealth of illustrative material. A good deal of this material is irrelevant, but most of it is interesting ; and life is longer than we commonly allow. In exegesis, in the actual explanation of difficulties, in assisting the reader to follow the consecution of his author's ideas, Scaliger is not, I think, particularly successful. His intolerance of stupid people disposed him not to make his Commentary too helpful. It is said also by those who are competent to judge that his knowledge of astronomy was poor. This is urged by Huet, whose knowledge of astronomy was good. How far it is true, or how far,

[^49] (Opusc. Var., 16io, p. 356).
${ }^{1}$ This was Scaliger's principal achievement in the first edition. ${ }^{\circ}$ His finest emendations belong to the edition of 1600 .
${ }^{2}$ See Scaliger, ed. 2, Prolegomena, p. 7.
${ }^{3}$ Dan. Heinsius told Gevartius that he had often heard Scaliger say that his Manilius was, after the Emendatio, his best work, and the one on which he most prided himself (MS. note in a Bodleian copy of Manilius, Auct. S. 2. 23).

## INTRODUCTION III

if true, it disqualified Scaliger for the best results in Manilius, I cannot say. That Scaliger makes blunders in astrology is certainly true; but I am not clear that they arise from ignorance. ${ }^{1}$ In Latin also he makes again and again bad blunders, propounding interpretations of words and phrases and lines which a moment's reflection-so one would think-would have assured him were false. The fact seems to be that to a great patience in research he added, as is not uncommon, a certain impatience of the idea of error in himself. He makes mistakes not at all because he does not know better, but just because he does. It never occurs to him that he can be wrong, that a great man can err as badly as Bonincontrius.

The faults, however, of Scaliger's editions do not deserve that we should remember them. It is true that he was not charitable to the faults of others. But the students of Manilius with whom he had to do were men who loved the darkness and hated the light. Scaliger had cast upon the text of Manilius a marvellous and almost magical illumination. But these men refused to walk in the light. When we read, as they stand in the second edition, Scaliger's savage taunts and reproaches, the worst we need think is that it was barely worth his while. Of these enemies no one now knows the names: ${ }^{2}$ but at the threshold of Manilian criticism Scaliger stands alone. And indeed even to-day he has no rival. The only possible rival is Bentley-so much inferior in knowledge, in patience, in circumspection, and in the faculty of grasping a whole, that only a native levity or the caprice of reaction could place him on the same height as Scaliger. These two, like Aries and Taurus, 'ducunt signa'; but Scaliger

> aurato princeps in uellere fulgens
> respicit admirans auersum surgere Taurum.

Judged by any standard Scaliger's Manilius is a great work. But it is also one of those works to which it is important to apply a historical standard. It marks the dawn of a new kind of scholarship. It breaks away from the desultory work of the Italian tradition. It founds a new tradition of which the leading idea is the ordered exposition of some whole work. The day of haphazard

[^50]
## MANILIUS AND HIS EDITORS

annotation is past. We have entered the epoch of serious, sustained and laborious commentation. Emendation, again, which with the Italians was a learned toy, becomes with Scaliger an occupation true to the meaning of the word. It becomes a sober study directed to removing from the texts of antiquity the faults which they have contracted in their transmission. But, above all, Scaliger's Manilius is important as a part of his lifelong effort to unify our knowledge of antiquity. Students of Manilius need perhaps to be reminded that this work was merely a preparation for a greater work. It was merely a prelude to the Emendatio Temporum. And what is most marvellous about it, as about the Emendatio, is its horizon. For contemporary scholars Roman, or at best Greek and Roman, antiquity constituted their moenia mundi. Scaliger passes these narrow bounds, and is the first scholar to try and see antiquity as a whole and all history and literature as a single order. ${ }^{1}$ And already in the Manilius one is sensible of this infinite range. No previous work of scholarship offers any parallel to it, and perhaps no succeeding work. Bentley and Lachmann are great names in Latin scholarship, but when one sets this single work of Scaliger in its true historical perspective the whole sum of their achievement appears in comparison something thin and unreal. ${ }^{2}$ Beside Scaliger they seem but blood-


Scaliger's first edition appeared in $1579 .{ }^{8}$ The volume of 1590 ,

[^51]
## INTRODUCTION III

which Bechert ${ }^{1}$ speaks of as Scaliger's second edition, is merely a reprint of the text and commentary of $\mathbf{1 5 7 9}$, accompanied by the Variae Lectiones of Franciscus Junius. What Scaliger thought of this work may be seen from his Letters, pp. 165, 173-4 (1625), where the asterisks-as we are instructed by the Clavis of Colomesius ${ }^{2}$ - hide the name of Junius; from the Scaligerana s.v.; or from a number of notes in Manilius, ${ }^{3}$ ed. 2. What Junius himself thought of it may be seen from a letter of his preserved in Burmann's Sylloge, i, p. 41 r. 'Flagro admonendus' is Scaliger's rough comment in one place upon this foolish man. Yet posterity owes to Junius a deep debt. For his work seems to have stung Scaliger into an indignation ${ }^{4}$ which could only be laid to rest by the publication of his own edition in a revised form. Junius had employed Bonincontrius, and he had obtained some report of the readings of $G .{ }^{5}$ And for his second edition Scaliger studied carefully both these authorities. The second edition appeared in 1600. Scaliger meditated, and made collections for, a third edition. His material for this work passed ultimately into the hands of J. H. Boekler (Boeclerus), a Professor in Upsala, who embodied it in an edition which saw the light in Strasburg in 1655. This edition was prefaced by the notes upon Manilius of Thomas Reinesius and of the astronomer Ismael Bullialdus (Bouilleau). These notes have little value (save perhaps for Bullialdus' conjecture 'reddis sic oribus ora' at II. 96). ${ }^{6}$
terme") to make out the sense of Manilius in these difficult places.') See p. xl.

Scaliger's first edition should perhaps be more used than it is. In external form (it is an excellently printed small quarto volume) it is greatly superior to its successor : and the Commentary does not suffer from overloading, but is full of brief, direct, and forcible notes-the whole is contained in 68 small pages. Moreover, to judge Scaliger's powers truly, it is worth while to observe what he can do without Gemblacensis.
${ }^{1}$ Leipz. Stud., 1878, p. $6 . \quad{ }^{2}$ Opuscula, p. 148, Ultrajecti, 1659.
${ }^{3}$ e.g. in Book II. 147, 153, 158, 228, 230, 279, \&c. In each case the allusion is to Junius, though he is nowhere named-Scaliger did not mean to make this fool famous.
${ }^{4}$ In the Scaligerana (s. v. Junius) he is spoken of with extraordinary bitterness. Funerum Liber xii, Poemata, p. 105 (1615), is a very lukewarm palinode.
${ }^{5}$ Cf. e. g. his note on p. 56.
${ }^{6}$ All extant copies of Scaliger's second edition seem to be dated 1600. But a portion of the issue must, I think, have appeared in 1599. Casaubon, Epist. (Magdeburg, 1656), p. 208, writes to Scaliger on vi Kal. Aug. 1599: Ixxxiv

## MANILIUS AND HIS EDITORS

' Post illum (Scaligerum) quievit Manilius usque ad Richardum Bentleium,' says Jacob. ${ }^{1}$ But this is to go too fast. Scaliger's first edition appeared in 1579 . Nearly a hundred years later ${ }^{2}$ there was published in London ( 1675 : Mr. Housman says 1674 , but my copy is dated 1675) Edward Sherburne's translation of, and commentary upon, Book I. It is surprising how many of the countrymen of Newton have pleased themselves with Manilius, and if only as the first of them Sherburne deserves gratitude. But he deserves gratitude on other grounds also. His translation (which is in heroic verse) is not good, but it is not bad. As verse it has a good many of the merits of the verse of the time. As a rendering of Manilius it is pretty honest, not freer than Pingré and not much less accurate. But it is the notes to this translation which chiefly deserve praise. Of the Latin text Sherburne has nothing to say, ${ }^{3}$ but around his English rendering of it he has massed a vast collection of illustrative and explanatory matter, drawn from all sources. He is, in fact, in this department the
'Manilium tuum edi fama ad nos peruenit.' This seems to be Casaubon's way of asking for a copy. Scaliger writes to him, sending Manilius, on xii Kal. Oct. 1599 : Epist., L. B., 1627, p. 177. (Casaubon's answer to this letter, xvi Kal. Mart. 1600, may be seen in Epist., 1656, p. 223.) Earlier, on September 30, 1599, Scaliger had sent Manilius to Lipsius: Burmann, Sylloge, i, no. 239, p. 242. On November 29, 1599, Monanthveil writes to thank Scaliger for a copy of Manilius (Epistres à M. de la Scala, p. 137): and a similar letter of thanks from Rigault (ib., p. 491) is dated November 30 of the same year.

It appears that of Scaliger's Catalecta, ed. i, some copies bear the date 1572, some 1573: cf. Manuel du Libraire, i, col. 1639. Perhaps, therefore, of both this and of the Manilius there were issued a certain number of 'advance copies' for friends, \&c. The same may have happened with the Festus : see on this Bernays, Scaliger, p, 279.
${ }^{1}$ De Manilio Poeta, p. 3, note.
Between Scaliger and Sherburne lie Gronovius (whom Sherburne had studied) and Barthius. Gronovius' notes are to be found partly in the Observationum Libri Tres, partly in his Letters in Burmann's Sylloge, and partly in the Diatribe in StatiSiluas. Upon Book II he ofters not more than half a dozen emendations, of which one (pestisque, 228) is certain, one (umbrato, 139) is plausible, the rest have little merit. Barthius' conjectures are given in his Aduersaria; but the Indices to this work are so unilluminating that I made very scant researches in it. It is a pity that N. Heinsius never turned his serious attention to Manilius. I can nowhere find more than seven suggestions of his upon Manilius, of which only one'struxisset (or statuisset) ouilia monte,' IV. 28-is worth quoting.
${ }^{3} \mathrm{He}$ contemplated, however, an edition, and had employed both $G$ and the Codex Pithoei: Bentley, Lellers, p. 37.

## INTRODUCTION III

only editor who adds anything to Scaliger that is worth speaking of. He is generously praised by Bentley, and he deserves remembrance as a man of multifarious learning in a generation and place where it was not common. His pictorial presentment of the two celestial hemispheres is still the most beautiful and usable thing of its kind that is to be found in editions of Manilius.

Four years after Sherburne appeared the Delphin edition of Michael Du Fay, who appropriates to himself the fruits of all these scholars' labours. Du Fay was not himself a man of original mind or fine critical discernment. But his work is an interesting example of the manner in which the zeal of second-rate scholars so often achieves results of far-reaching benefit. Scaliger, as I said, did not much care to help the stupid-or even the mere beginner : he did not understand either class. Du Fay was neither a stupid nor an ignorant man; but he had sympathy with, and knowledge of, the needs of such men. To the extent of his knowledge he is a good teacher, but with a faulty critical judgement. It is fashionable to disparage him. ${ }^{1}$ Yet save for his assistance the students of Manilius would be fifty per cent. fewer than they are. His Index Verborum is indispensable. His Latin paraphrase, though now and again it shirks a difficulty, is the work of a competent man. Again and again it tacitly corrects the blunders of Scaliger : in many places it will be found still right where all later editors are still wrong. It has been of service to men of much finer talents than Du Fay's ; and even the great Bentley, who speaks so contemptuously of 'bonus Fayus', will be found to owe to it more than he acknowledges. I should perhaps even say that he has sometimes stolen from it.

Du Fay had some prejudice against Scaliger ; but he was too careful a man to let it run away with him. In a lengthy Appendix, however, he prints the Animadversiones in Manilium et Scaligeri Notas of a scholar whose prejudice against Scaliger was greater than his own, ${ }^{2}$ as was also his competence to criticize him-Huet. Huet, in a few brief words towards the close of the Animadversiones, allows handsomely the merits of Scaliger, and speaks justly

[^52]
## MANILIUS AND HIS EDITORS

but with restraint of his deficiencies. Yet his notes as a whole are ungenerous and even carping. In many places he undoubtedly sets Scaliger right in matters both of astrology and of Latin. And just as he can see the faults in Scaliger, so he can see the faults in the text of Manilius. But only very rarely does he heal these latter. His touch in emendation is heavy, and the debt of Manilian scholarship to him will never be more than that he was quick to diagnose disorders which he was incompetent to cure.' 'Acutissimus Huetius,' Bentley calls him. And he was a man not only of great 'acuteness' of mind but of a very extended learning. ${ }^{2}$ In scholarship, in astronomy, in chemistry, in alchemy, in philosophy, he was a competent practitioner; and his interest in learned pursuits was everywhere genuine. But the faults of his Manilius are the faults of all his work-the faults of the author of the Traité de la Foiblesse, of a man, that is, devoid ultimately of a real devotion to truth, or perhaps of a belief in it. This is why his Animaduersiones will, in any student of Manilius who has felt at all deeply the influence of Scaliger, always excite impatience. His dislike of Scaliger was probably in part theological. But it is in any case unfortunate that the only man in Europe who was capable of appreciating Scaliger's Manilius should be chiefly remembered for animadversions upon it of a kind rather mean and trifling.

I would enter here a plea for a Manilian student whom I have never seen praised by any one, but a student who had some scholarship, a real appreciation of Manilius, and much good sense and taste-Thomas Creech. Creech published in London in 1697 a metrical translation of the whole of Manilius. In the Preface to that book (p. Ixviii, cf. p. 88) he speaks of 'a Latin edition of his (Manilius') works which I shall think myself obliged to undertake, unless a very learned gentleman, from whom I have long expected it, frees me from that trouble and obliges the world with his own observations'. The 'very learned gentleman' is, I suppose, Bentley; and Creech died some forty years before Bentley's edition saw the light. (It was perhaps well that he did not try to forestall Bentley.) Bentley, I think, nowhere mentions

[^53]
## INTRODUCTION III

him. Yet he must, I fancy, have taken from him without acknowledgement the brilliant and certain correction Pallas at II. 21 (vide ad loc.). I daresay he owes to Creech a good deal more, but I have not read Creech's version with any care save for Book II. As a translator Creech is, in the smoother passages of Manilius, graceful and lively. I have quoted him occasionally in my Commentary, and he will I think be admitted to merit such occasional citation. When he has to do with 'trines' and 'quadrates' and 'twelfths' he might well be expected to be, and indeed is, unreadable. His renderings are never close, and there is a woful amount of 'padding '. The following, from the exordium to Book II, gives a fair idea of his merits and defects:

The mighty Bard in lasting numbers sings Ilium's long wars, the King of fifty kings, Brave Hector's brand, the bloody dreadful field, And Troy secure behind the hero's shield:
He sings Ulysses and his wandering years
In time and glory equal to his wars:
He sings how twice he conquering ploughed the main,
Whilst Scylla roared and Neptune raged in vain,
And how at home he fixed his tottering throne,
Redeemed his honour and secured his son:
Usurping woers felt his thundering sword,
And willing nations knew their native lord.
It must be remembered that this is more than twenty years prior to Pope's Miad.

Creech's long Preface on the date and name of Manilius, and on the Stoic philosophy, is perhaps not worth reading to-day. But much is still written upon the same subjects which is no better.

From Creech we pass to the 'very learned gentleman' whose 'observations ' Creech desired to see. Bentley's edition, prepared for the press, prefaced, and published by his nephew in 1739, has always been sufficiently praised, and has for the most part deserved the praise accorded to it. Mr. Housman, it is true, speaks as though he had discovered this book by accident on a neglected shelf in the British Museum, and was the first person to become aware of its merits. But this is not so. Bentley's edition with its transcendent merits has long been known and appreciated. ${ }^{1}$ Indeed, its virtues are so obvious and outstanding that

[^54]
## MANILIUS AND HIS EDITORS

such a studied panegyric as Mr. Housman bestows upon them (though his paragraphs are true and tellingly expressed) seems perhaps a little banal. Bentley's great merits are his fine sense for Latinity, his knowledge of all Latin, his wide experience in the pathology of texts, his unbeaten ingenuity in conjectural emendation. In these he has no rival. ${ }^{1}$ He possesses in addition a pithy style of racy commentation which leaves the reader never tired. (Even the undertones of malice afford an ashamed pleasure.) Moreover Bentley, though he makes mistakes, never fails to redeem them. If he emends unnecessarily he commonly in so doing illustrates his author in some happy and relevant way. If he emends wrongly, where emendation is none the less necessary, yet he is usually more or less right, even there ; he gets to the kind of thing that Manilius must have written. Nothing impresses one so much in reading his notes as again and again the sense that if this is not right something very like it must be. Many corrections which are far removed from the ductus litterarum-as axe for omni at III. 374-yet compel assent ; even more violent alterations still-such as II. 37 I , sexangula for subeuntia-'give us pause.' .
Viewed as a work of sustained exegesis Bentley's edition is clearly inadequate. His interpretations never put before us the evolution through all its parts of a sustained argument. He flashes his light fitfully on patches of the argument. But he does not supply a continuous and steady illumination. Not possessing Scaliger's infinite erudition, he does little towards illustrating the subject-matter of the Astronomica from other sources. Perhaps, indeed, when we compare him with Scaliger, we must, to be just, view his work as purely that of a textual critic. As a textual critic he is easily Scaliger's superior in elegance, though Scaliger corrected the text with certainty in more places than Bentley. We must remember, however, that Bentley started with a fair text and with good MS. material. Scaliger started with a text utterly chaotic, and being concerned mainly to remove the more obvious and hideous of its blemishes, it is not surprising that in the department of elegance he left a good deal to Bentley ; ${ }^{2}$ nor that Bentley,

[^55]lxxxix

## INTRODUCTION III

with such advantage as his fair text and fair MSS. gave him, was equal to the task bequathed to him. Parts of it he discharged not over-scrupulously: often, indeed, he is contumaciously lazy ; but to his edition Manilian scholarship owes more than to any work save Scaliger's. ${ }^{1}$

I think it worth while to say a word or two on the subject of the dates connected with the composition of Bentley's Manilius. Bentley was born in 1662 . The earliest references which I can find to the projected commentary belong to the year 1692 . The idea first suggested itself to him perhaps as a result of his Oxford visit-he went to Oxford with the young Stillingfleet in 1689. In Oxford he seems to have made acquaintance with Edward Bernard, ${ }^{2}$ Savilian Professor of Astronomy and a collector of books and MSS. It must have been in Oxford that he first saw Bernard's MS. of Manilius now in the Bodleian, together with the Corpus MS. In 1699 the Manilius was finished. In that year, at any rate, Bentley writes in the Preface to the Phalaris (lxiii) that 'it (Manilius) had been published already, had not the dearness of paper, and the want of good types, and some other occasions hindered '. It was not as a matter of fact published until thirty years later. But it would be a mistake to regard it as a work which Bentley pondered for fifty years. Substantially it was finished when he was thirty-seven years old. It was in fact a work of his youth, and its virtues are those of youthful work, viz. independence and abounding virility. On the other hand it is, though it has many faults, notably free from such faults as are commonly charged to youth. There is, for example, no inaccuracy in the Manilius-and that in a subjectmatter so complicated that few scholars have avoided serious mistakes. Nor, again, is the rashness of conjecture which characterizes parts of the Manilius to be regarded as a fault of youth. Bentley's rashness in Manilius is nothing to what may be seen in his Horace-written when he was in his fiftieth year. He grew, in fact, more and more rash as he grew older, just because he grew more and more petulant and intolerant. The real fault of the Manilius is the same fault as that which caused its publication to be so long delayed-laziness. The book was ready in 1699 . Ten

[^56]
## MANILIUS AND HIS EDITORS

years later Richter sent Bentley a collation of $L$. Bentley already had one in 1693 ; and, save that he may have revised its readings by the aid of this new one, there is nothing to show that he did anything at all to Manilius after 1699 . When the work finally appeared, the Praefatio contained misstatements ${ }^{1}$ which Bentley should long ago have made impossible. And in the preparation of his text also his laziness is apparent. He collated $G$ himself, yet he merely quotes it at his convenience ; and his Apparatus exhibits merely variants from Scaliger's edition. For the other MSS. which he employs he depended upon the labours of other scholars. Those which he knew at first hand were such that a few hours' work at each would be sufficient to show their small value to so skilled a critic. Indeed, he says frankly to Bernard that he wants a collation of Codex Pithoei just in order to impress the public. ${ }^{2}$ So much was so great a man defective in application to those lesser labours of scholarship which are the true touchstone of devotion. If out of the thirty years during which the Manilius lay idle Bentley had given one to the serious revision of it he would have made his work twice as good as it is.
' Dictator Britannus' is the ill-natured but not undeserved title by which Stoeber (who in 1767 appended to König's reprint of Bentley's text his own commentary upon it) alludes to Bentley. König had intended to print merely Bentley's text. Stoeber adjured him not to give this to the world unaccompanied by the notes of some learned man. 'Placuit consilium,' says Stoeber modestly : König commissioned Stoeber to supply these notes. The commission was given to a man who undoubtedly was learned. But Stoeber's much learning would truly seem to have affected him in the proverbial way. When I read Mr. Housman's estimate of him, I thought that probably, like so many of Mr. Housman's judgements, it was too highly coloured. But I have had Stoeber constantly by me for a long time, and I have read all his notes upon Book II. I can only say that his work seems to me to be scarcely that of a sane man. One reads a line or two of some criticism of Bentley's text, and one says at once, 'Oh, but he cannot have read Bentley's note.' But in the very next line he betrays, by borrowing something from it, that he has done so. Such men

[^57]
## INTRODUCTION III

are enigmas. Did He that made Bentley and Scaliger make thee and Franciscus Junius? ${ }^{1}$

Pingre's text, translation, and notes ( 1786 ) have long enjoyed an enviable position. This editor alone among editors of Manilius seems to be hated by no one. How this has come about I do not know. I suppose that Pingré fell upon what in the world of scholarship were quiet times. He was a competent man who had no one more competent ready to rap him over the knuckles for his mistakes, and as he set out modestly to be useful he did not offend, as did Scaliger and Bentley, men of inferior abilities to his own. His notes are few and brief and good. His text may be described as Bentley and water. His translation (somewhat like Poste's translations of Aristotle) leaves always the impression that the translator has understood his author, while how and why he has come to do so remains a mystery. On a difficult construction Pingre's rendering throws no light. Occasionally he corrects Du Fay, and indeed he worked with a better text. Sometimes he lapses into mistakes which Du Fay had avoided.

Jacob's text (1846) has been for half a century the text in which Manilius has been commonly read. It will now undoubtedly be superseded by Breiter, and justly. The text itself is barely readable, but until Bechert it was the only one furnished with an Apparatus Criticus of any value. In addition to recording the MS. variants Jacob recorded also the variants of the edition of Molinius, thereby giving the reader a fair notion of the text of Manilius as it was before Scaliger took it in hand. Occasionally also in his Apparatus he ventured on interpretations of difficult passages ; and here, even when he is wrong, he is often useful. The Appendix of diagrams which concludes the volume is also of considerable service, ${ }^{2}$ so too the Index. It is not difficult to see, therefore, why Jacob has so long held so strong a position. Nor is he without higher merits. In his Lübeck programme he showed considerable penetration in explaining the transpositions detected

[^58]
## MANILIUS AND HIS EDITORS

by Scaliger at I. 355 , \&c. In appraising the value of his different MSS. his marked penchant for Vossianus II, much as it misguided him, betrays a sound instinct for the merits of $M$. In emendation, though usually clumsy, he was often right. And, speaking generally, it may be said of him that he had a vigorous judgement strangely compounded of good and bad. His feeling for the Latin language was poor.

Jacob's text, as I have just said, will be easily superseded by that of Breiter. Breiter's text I reviewed ${ }^{1}$ on its appearance in a manner which I think did justice to its merits. Since then I have been using it constantly, and my attention has perhaps naturally been rather much fixed on its defects. But it is not fair to compare any text of Manilius with what one thinks a text should be: one should compare it with its existing rivals. And of existing texts of Manilius I still think Breiter's the most serviceable. Of the Commentary which has recently followed the text, I am sorry to be able to speak in terms only of very mixed praise. I have not found it useful to myself; and in Book II, where I have examined it with most care, I have often thought it wrong beyond the limits of what is excusable. Not to go outside this Book-it is not, for example, excusable that at II. 485 Breiter should render consilium ipse suum est as amat se. Not only can the Latin not mean this, but it also involves us in egregiously false astrology ; moreover, so far as I know, no previous editor has fallen into Breiter's blunder. Still less is it excusable at II. 722, that in building up a whole series of complicated calculations, he should start from the statement that 'if the moon is in the tenth degree of Aries it will be in the dodecatemory of Sagittarius'. Yet Breiter not only makes this statement, but he bases upon it a new and elaborate interpretation of a whole passage of well known difficulty; while at the same time he prints a numerical table in which all the figures (since they are taken from other authorities) contradict everything that he has said in his notes.

In one or two passages in my Commentary I have called attention to other errrors hardly less notable. And Breiter's Commentary as a whole, leaving as it does the impression that it was finished off with undue haste, is to my mind not worthy of a scholar who has

[^59]
## INTRODUCTION III

in the past deserved well of Manilius. ${ }^{1}$ Breiter's death, which followed close upon the publication of his Commentary, is a real misfortune. For he was for half a century a high example of continued devotion to obscure and unrewarded studies.

Bechert's text-in the English Corpus Poetarum-is valuable not so much for itself as for its Apparatus. The text itself is based upon critical presuppositions now generally recognized as false ; and in some places it would even seem to have been framed in a spirit of deliberate contrariety. The Apparatus, however, including as it does-and as Breiter's does not-the principal conjectures of editors, is, despite some odd omissions, the best that exists. Owing, however, to the fact that it forms part of a large and unwieldy volume Bechert's edition can never be very usable. The same scholar's dissertation in Leipziger Studien, 1878, pp. 3-6I, goes deep and is useful; but, on the subject of the Manilian archetype, it is, ${ }^{2}$ in the main, I think, wrong.

Of Manilian scholars in this country who are still living it would be unbecoming that I should speak save with some reserve. Foremost among them is Ellis, who, if I may say so, stands to Bentley somewhat as Huet to Scaliger, though naturally his positive services to Manilius are greater than Huet's. His Noctes Manilianae constitutes a sharp and shrewd attack upon Bentley, yet with a fair recognition of Bentley's brilliant qualities. When he wrote the Noctes Ellis had not yet discovered Matritensis, and this, for present-day criticism, imposes a limitation on parts of his book. But the work as a whole is indispensable to the student of Manilius. Perhaps no recent editor brings so much unborrowed learning to the task of interpreting the Astronomica. Some of his emendations, as I. 582 limes for timens, I. 723 nondum for mundum, will take their place in all subsequent texts.

Postgate's Silua Maniliana, to some extent a counterblast to Ellis' Noctes, is a work which may be read not only with profit but-what is more remarkable in so difficult a subject-without

[^60]xciv

## MANILIUS AND HIS EDITORS

hardship. It is written in a light and graceful Latin such as is now becoming, alas, rather rare ; and it contains much happy illustration and suggestive conjecture. One or two emendations (e. g. I. 739, III. 398) may be regarded as certain. It is perhaps a pity that this Silua is not more ample than it is. For it does not pretend to a sustained exegesis, and hardly goes beyond a collection of 'Suspiciones'. It is probably the only modern book upon Manilius which a feeling reader could wish to have been longer.

Of Mr. Housman's edition of Book I, with its numerous corrections of II-IV, I have said much of what I think elsewhere. ${ }^{1}$ I regret that some parts of it should have been written by so charming a poet as the author of A Shropshire Lad. Mr. Housman's book has excited a good deal of angry feeling, and it is always a misfortune when such feeling is excited among scholars-whose studies demand for their happy prosecution an even quietude. But this angry feeling will before long die down. And when it has done so, the real merit of Mr. Housman's work will, I think, be widely allowed. Very few editors of Manilius have understood their author so well. And this thorough understanding of Manilius Mr. Housman has not reached without a searching discipline. The greatness of his book is what does not appear in it-the hard work behind it. The external glitter is delusive. It hides an amount of solid and honest labour which the student of Manilius will recognize with increasing clearness in proportion as he himself grows in knowledge of his subject. It is this underlying austerity of learning which gives to Mr. Housman's work its real distinction.

We live in an age of learned pamphlets, and Manilius, like greater men, has had to endure the tender mercies of aspirants to a continental doctorate. I have thought it my duty to peruse so much of the occasional literature upon Manilius as is to be found in the Bodleian Library ; and I would not, if I could, accuse with cold words the zeal of the Librarian. My table, as I write, is strewn with sheafs of excerpts from this literature. Richter says somewhere that a book, to be worth reading once, must be worth reading twice. If this is to be true also of a pamphlet, few will be saved. A pamphlet perhaps justifies itself if it can be reador most of it-at all. It is beside my purpose to do more than

[^61]
## INTRODUCTION III

mention briefly the principal dissertations upon Manilius to which I am conscious of owing anything.

The pamphlet literature upon Manilius opens auspiciously with the name of Lachmann, ${ }^{1}$ whose treatise De Aetate Manilii was published in $\mathrm{I}^{1} \mathrm{I} 5$, and is most easily accessible in his Kleine Schriften, vol. ii, p. 42, Berlin, 1876. Lachmann assigns the Astronomica to the reign of Tiberius ; and this essay is perhaps not particularly valuable to-day. But it would seem as though its republication in 1876 had given the stimulus to the considerable output of literature upon the same subject which began in the eighties. In 1880 B. Freier published at Göttingen a tract De Manilio Poeta, followed in 1881 by the Groning programme-having the same title-of J. Woltjer. Both pamphlets treat of the date of Manilius. That of Freier may be regarded as the more considerable. It reaffirms, as regards the date of Manilius, the position of Lachmann. ${ }^{2}$ Peculiar to Freier is the thesis that Manilius was a friend of Germanicus and accompanied him to Germany. Freier holds that IV. 209-12, 548-52 refer to Germanicus. But his exposition of this view is vitiated by the fact that he confuses chronocrator and horoscope (pp. 28, 33 sqq., 73 sqq.)-a confusion made by more than one recent writer upon Manilius : see my note on II. 507 sqq. Nor is it easy to follow Freier, in referring I. 893-5 to events in the reign of Tiberius. Surely philosophy, not history, is here in question, and the allusion is to the Stoic doctrine of $\dot{e} \kappa \pi \dot{v} \rho \omega \sigma / s$ (nouum . . . sepulcrum-Housman emends-means ' yet another
 until Lanson's De Manilio Poeta eiusque Ingenio. But, before speaking of Lanson, I should-to sustain a chronological ordersay something of a scholar who has, I think, been more useful to students of Manilius than any other living critic. In 1882 there appeared in Strasburg Adolf Cramer's De Manilii qui fertur Elocutione. This work perhaps needs an Index, and its critical presuppositions leave something to be desired. But it is an invaluable work of reference upon all questions of metre, rhythm, grammar, and diction. Its long array of Vergilian and Ovidian

[^62]
## MANILIUS AND HIS EDITORS

parallels enables students for the first time to set Manilius in true relation to the literature of his age. To Cramer's paper ' Der Infinitiv bei Manilius' in Commentationes in Honorem Gulielmi Studemund (Strasburg, 1889, pp. 6r-75) I owe some references at 270 and 816-19. The same scholar's laborious essay upon the earliest editions of Manilius (Ueber die ältesten Ausgaben der Astronomica des M., Ratisbon, 1904) is an indispensable work for any one trying to find his way among the early printed copies of the Astronomica. ${ }^{1}$ Indeed, so far as I know, Cramer has written nothing upon Manilius that does not repay reading. Lanson's brochure, which I have just mentioned, appeared in Paris in 1887. It is reviewed by M. Cartault in Rev. Crit., No. 15, 1888. Lanson holds that Manilius I-III was written after the clades Variana, but before Ovid's Pontica. IV-V he thinks subsequent to the Pontica (cf. Cramer, Man. El., p. 4). Cartault's view is not essentially different. I am not sure that arguments from the Pontica have much value. The coincidence Pont. iv. 4. 4 I 'toto comitante senatu' = Man. IV. 60 'toto spectante senatu' may be mere coincidence. Lanson thinks, with Bentley, that Manilius was of Asiatic nationality : see below, of Kraemer. ${ }^{2}$ His contention (chap. ii) that Manilius was not a Stoic, I think paradoxical. (' Si quis autem carmen penitus uniuersumque considerauerit minime Stoicum fuisse Manilium fatebitur, etsi interdum Stoice locutus est,' p. 39.) Yet it is perhaps a useful corrective to what I may call the Posidonian theory (see below, of Mueller), and I can sympathize heartily with M. Lanson when he urges (p. 53) that Manilius is a poet and an astrologer first and anything else only in a secondary sense. On the literary qualities of Manilius (chaps. iv-v) Lanson speaks with the grace and good sense usual to French scholars. In the same year to which Lanson's essay belongs P. Thomas published at Ghent his Lucubrationes, ${ }^{3}$ valuable for its accurate collation of the Gemblacensis. The same writer's Notes et Conjectures sur Manilius appeared (also at Ghent) in 1893 . I am glad to find Thomas praising the 'livre

[^63]
## INTRODUCTION III

savant et suggestif' of Ellis. Against the nineties I have recorded impressions (apart from Thomas' Notes) of four works. The first of these is Kraemer's De Manili qui fertur Astronomicis (Marburg, 1890). Kraemer maintains, wrongly as I think, an Augustan date for the whole of the Astronomica. ${ }^{1}$ This dissertation is neither so interesting nor so important as a much later publication by the same writer, Ort u.Zeit der Abfassung der Astronomica des Manilius (Frankfort, 1904). This latter dissertation is not only learned and ingenious, but is distinguished by the breadth of its literary interests. Kraemer is particularly happy in the manner in which he brings out the essentially Roman character of Manilius' genius. The references to Germany (I. 896; III. 633 ; IV. 692, 715,794 ) are genuinely Roman. Roman nationality comes out, again, in the frequent passages where Manilius contrasts the Greek and Latin languages (II. 888, 897, 909, 916, 937 ; III. 36 sqq. ; IV. 812, 845 ; V. 645). Manilius, again, shows an inner familiarity with Latin literature, particularly contemporary literature. And, finally, Manilius has a strong 'Römisches Staatsbewusstsein'. When he speaks (I. 792 ; IV. $40,48,566,599,658$ ff., 778 ) of, c. g., Hannibal, one might think that one was listening to Horace or Livy (pp. 4-9). Kraemer has since published an entertaining treatise, De locis quibusdam qui in Astronomicon quae Manilii feruntur esse libro primo extant ab Housmano Britannorum uiro doctissimo corruptis (Frankfort, 1906). This is reviewed by Kleingünther in D. L. Z., 1906, Nov. 3. The compliments in this review are returned by Kraemer in a review of Kleingünther in D. L. Z., 1907, pp. 2976 sqq. For Kraemer's pamphlet see also Stoecker in Berl. Phil. Woch., 1907, pp. 776-8. Kraemer has lately, in Bursian's Jahresbericht, 1908, passed in review the more recent contributions to Manilian study. Bechert's De M. Manilio Astronomicon Poeta appeared in the year following the first of Kraemer's pamphlets (Leipzig, 1891). On the date of the Astronomica Bechert takes a view diametrically opposed to that of Lachmann and Freier: holding with Kraemer that the whole poem was written under Augustus. The most valuable portion of his paper is the second chapter where (again like Kraemer) Bechert emphasizes the very Roman character of Manilius. Tappertz's De Coniunctionum usu apud Manilium (Munster, 1892), noticed by Ellis in C. $R$. viii, p. 213, is

[^64]
## MANILIUS AND HIS EDITORS

a useful supplement to Cramer's De Manilii Elocutione. Bitteraufs Observationes Manilianae ( 1898 ), with its sharp attack upon Ellis, 'cui raro quae alii receperunt placent,' is, despite faulty scholarship (contră is defended at II. 252), vigorous and occasionally acute. F. Ramorino's paper, Quo Annorum Spatio Manilius Astronomicorum Libros Composuit (Stud. Ital. di Fil. Class. vi, 1898, pp. 318-52), assigns the composition of our poem to the first years of Tiberius' reign. I fancy that pp. 345-50 (on the theatre of Pompey) are necessarily labour lost.

The present century breaks new and unfortunate ground with Edwin Mueller's De Posidonio Manilii Auctore (1gor). In this laborious treatise I am not able to feel much sympathy for anything but the notable industry of its writer. Thinking men in Rome necessarily, in the period in which Manilius lived, breathed an atmosphere of Posidonius, very much as thinking men to-day may be said to breathe an atmosphere of Darwin. But not every one who says 'Evolution' has read The Descent of Man; and as soon as we begin to think of Manilius as writing with a Posidonius open in front of him we make both him and ourselves ridiculous. These influences are more subtle than the critics who try to trace them.

A more useful work in the department of Quellenforschung is Johann Moeller's Studia Maniliana (Marburg, 190r). As a work of reference on the sources for Manilius' mythology this paper is valuable. I am sorry to find its writer propounding at IV. 800 the emendation pisce surrrepta. What he says upon pp. 38 sqq . of the relation of Manilius to Germanicus is, I think, not cogent. In 1905 appeared at Leipsic H. Kleingünther's Quaestiones ad Astronomicon Libros. Of this the most valuable portion is perhaps the Excursus on the confusion of letters in the Manilian MSS. In his criticism of Housman (whose position he combats with regard to the date of Manilius) Kleinguinther is, I think, impar congressus Achilli. A later pamphlet by the same writer is Textkritische und exegetische Beiträge zum astrologischen Gedicht des sogenannten Manilius (Leipsic, 1907). To the same year belong three pamphlets by Italian scholars: G. Pierleoni, L'Alliterazione nell Astronomicon di Manilio (in which the principal novelty is Pierleoni's view that Manilius was a Gaul); M. Melillo, Studi latini (Molfetta, 1907); idem Maniliana (Naples, 1907). Melillo's pamphlets are known to me only from a notice by Kleingünther in $D . L . Z$. , 1909, p. 1562.
xcix

## SIGLA

$G=$ Codex olim Gemblacensis nunc Bruxellensis Bibl. Reg. 10012, saec. xi
$G^{1}=$ prima manus in $G: G^{2}$ manus altera aequaeua
$L=$ Codex Lipsiensis Bibl. Paulin. 1465, saec. xi
$L^{1}=$ prima manus in $L: L^{2}=$ manus altera aequaeua
$M=$ Codex Matritensis Bibl. Nat. M. 3I, saec. xv
Ven. $=$ Lectiones Codicis Veneti deperditi (saec. xi) ex notis manuscriptis Bentleii excerptae
codd. $=$ consensus librorum GLM
dett. $=$ codices deterioris notae

# MANILI ASTRONOMICON 

II

## MANILI

Maximus Iliacae gentis certamina uates et quinquaginta regum regemque patremque, castra decem aestatum uictamque sub Hectore Troiam erroremque ducis totidem quot uicerat annis instantem bello geminata per agmina ponto
ultimaque in patria captisque penatibus arma ore sacro cecinit; patriam quoi cura petentum dum dabat eripuit, cuiusque ex ore profusos omnis posteritas latices in carmina duxit amnemque in tenuis ausa est diducere riuos
unius fecunda bonis. sed proximus illi Hesiodus memorat diuos diuumque parentes et chaos enixum terras orbemque sub illo infantem et primos titubantia sidera cursus
Titanasque senes Iouis et cunabula magni
et sub fratre uiri nomen sine matre parentis atque iterum patrio nascentem corpore Bacchum. omniaque inmenso uolitantia lumina mundo. quin etiam ruris cultus legesque notauit militiamque soli; quod colles Bacchus amaret, 20 quod fecunda Ceres campos, quod Pallas utrumque, atque arbusta uagis essent quod adultera pomis, siluarumque deos sacrataque flumina nymphis; pacis opus magnos naturae condit in usus. astrorum quidam uarias dixere figuras,25 signaque diffuso passim labentia caelo in proprium cuiusque genus causasque tulere: Persea et Andromedan poena matremque dolentem solantemque patrem raptuque Lycaone natam officioque Iouis Cynosuram, lacte Capellam et furto Cycnum, pietate ad sidera ductam

[^65]Greatest of all poets is he that with inspired lips sang of the death-struggle of the Ilian race, of Priam king and father of fifty kings, of the warfare ten summers long, and of Troy that fell with the fall of Hector; that sang the wanderings of Ulysses, leader of men,-how, for years as many as those wherewith he conquered Troy, he pursued yet another war; and on the seas marshalled battle again, and in his native land, storming his own roof-tree, fought a last fight. To that poet the zeal of rival claimants has given many father-lands-only to leave him none. Yet from his lips has all after-time drawn for its song a stream of inspiration welling up abundantly: and boldly parcelling the parent stream into meagre rivulets has grown fertile from the richness of a single soul. Next unto him is Hesiod, speaking to us of gods and the parents of gods: of Chaos travailing with Earth: of the heaven under chaos as yet inarticulate, what time the stars stumbled as they essayed their first motions: of the Titans old and of the cradling of Jupiter : of Jupiter that as brother was husband and that was father to one whom no mother bare: of Bacchus born a second time from the body of his father: of all the lights that float and flash in the wide sky. Moreover, he appointed for us the tilling of the fields and the laws thereof, and all our fight with the soil. He it was that taught us how Bacchus loves the hillside, fecund Ceres the meadow-land, Pallas hillside and meadowland alike: and he taught us how trees may be ignobly mingled with fruits not their own. He told us of the woodland deities and of streams hallowed by the presence of nymphs: and established works for us in our quiet days that we might attain to the mighty uses of nature.

And there are certain of the poets who have described to us the diverse configuration of the stars, and have assigned to their proper class and cause all the constellations that glide at large in the spreading heaven. Perseus and Andromeda, with the mourning mother and the father speaking comfort,-these were taken to the stars by reason of the punishment which Andromeda bore. Thither was the daughter of Lycaon transferred by reason of her ravishment, Cynosura because of her tender care of Jupiter, Capella for her milk, the Swan for love's disguise, Erigone for her

[^66]
## MANILI

Erigonen ictuque Nepam spolioque Leonem et morsu Cancrum, Pisces Cythereide uersa, Lanigerum uicto ducentem sidera ponto, ceteraque ex uariis pendentia casibus astra
aethera per summum uoluerunt fixa reuolui.
quorum carminibus nihil est nisi fabula caelum, terraque composuit caelum, quae pendet ab illo. quin etiam ritus pastorum et Pana sonantem in calamos Sicula memorat tellure creatus;
nec siluis siluestre canit perque horrida motus rura serit dulcis musamque inducit in arua. ecce alius pictas uolucres ac bella ferarum, ille uenenatos anguis, hic $\dagger$ nata per $\dagger$ herbas fata refert uitamque sua radice ferentis.
quin etiam tenebris inmersum Tartaron atra in lucem de nocte uocant orbemque reuoluunt interius uersum naturae foedere rupto.
omne genus rerum doctae cecinere sorores; omnis ad accessus Heliconis semita trita est, et iam confusi manant de fontibus amnes nec capiunt haustum turbamque ad nota ruentem. integra quaeramus rorantis prata per herbas undamque occultis meditantem murmur in antris, quam neque durato gustarint ore uolucres, ipse nec aetherio Phoebus libauerit igni. nostra loquar; nulli uatum debebimus ora, nec furtum, sed opus ueniet, soloque uolamus in caelum curru, propria rate pellimus undas. namque canam tacita naturam mente potentem 60 infusumque deum caelo terrisque fretoque ingentem aequali moderantem foedere molem, totumque alterno consensu uiuere mundum et rationis agi motu, cum spiritus unus per cunctas habitet partes atque irriget orbem 65 omnia peruolitans corpusque animale figuret.
$3^{2}$ erigonem codd. 33 chitereide $G \quad 35$ ceterasque $L^{1} M^{1}$ : caeteraque $G$, ut saepe $\quad 38$ erraque $L \quad$ caelumque dependet $M \quad 39$ ritus pastorum Bentley: ritus pecorum LVen. : pecorum ritus GM 40 creatis $G L^{1}$ 41 perque] per quod $M 42$ arua dett. : auras codd. 43 cce $L$ hac bella $M 44$ uenenato sanguis (-es $L^{2}$ ) $L M \quad 45$ sua dett. : suam codd. 46 immersum Tartaron Scaliger: inmensum tartara codd.: atra Vossius natrā $G$ Ven. : nacta $M$ : nata ( $-\bar{a}$ in ras.) $L 48$ faedere $G$, ut saepe 49 docta $M^{1} \quad 50$ helicones codd. $\quad 52$ aduota $M \quad 53$ queramus $M$ rotantis $M$ 54 undamque] causamque (volebat musamque?) Ven. murmura nantri $M$ 55 gustarunt $L^{1} M \quad 56$ foebus $M \quad$ libauerit $M$ : librauerit $G L^{2}$ Ven. : liberauerit $L^{1} \quad 57$ natum $M \quad 58$ uolaui $M \quad 59$ proprio (a suprascr.)
justice, the Scorpion for the stroke he dealt, the Lion for his despoiling, the Crab for his bite, the Fishes by reason of the transformation of Venus; and the leader of all the signs is the Ram, for his victory over the sea. And all the other stars, they hold, revolve in fixed courses in the height of heaven, dependent upon the diverse haps of their earthly life. These are the poets by whose songs the heaven has become a fairy-tale and the earth has fashioned the sky on which it hangs.

The son of Sicily tells of the life of shepherds, and of Pan shrilling upon the reed-pipe: and to the woods he sings a more than woodland strain, and through the rough countryside sows his sweet notes, bringing the Muse to the fields. Behold another that sings of painted birds and warring beasts : and here one that tells of poison-bearing serpents, and there one that speaks of . . . herbs which carry in their roots life and death. Furthermore, there are poets who summon Hell itself into the daylight out of black night and the gulf of shadows. Breaking through the fixed ordinance of nature they unwrap and turn outwards the inward parts of the world.

Every subject have the curious Muses set to song. Every path that leads to Helicon is trodden bare: and by now the waters of song flow sullied from their source, nor do they suffice for those that would quaff them, and for the crowd that throngs ever to the old themes. Let us therefore follow over the dewy grass fresh meadow-lands and fountains that murmur musingly in caverns retired, fountains not yet touched by birds of steely beak, nor wasted by the lofty fire of Phoebus himself. I will speak out of my own wisdom, and the words of my mouth will I owe to none of the singers before me. And there shall issue no stolen strain, but all true work. I take my flight into the heavens in a car none other shares. In my own ship sail I the seas. For I shall sing of the strong silent thinking work of nature, and of God interfused in earth and sky and sea controlling in impartial covenant the mighty mass. I shall sing how the whole universe is alive with harmony upon this side and upon that, and is moved by the motions of Reason, one spirit indwelling in all its parts, shedding its dews upon the round world, swiftly speeding through all things and fashioning the body of things to breathing life.

[^67]
## MANILI

quod nisi cognatis membris contexta maneret machina et imposito pareret tota magistro, ac tantum mundi regeret prudentia censum, non esset statio terris, non ambitus astris,
haereretque uagus mundus standoque rigeret, nec sua dispositos seruarent sidera cursus, noxque alterna diem fugeret rursumque fugaret ; non imbres alerent terras, non aethera uenti, nec pontus grauidas nubes, nec flumina pontum,
nec pelagus fontes, nec staret summa per omnis par semper partes aequo digesta parente, ut neque deficerent undae nec sideret orbis, nec caelum iusto maiusue minusue uolaret. motus alit, non mutat opus; sic omnia toto
dispensata manent mundo dominumque sequuntur.
hic igitur deus et ratio, quae cuncta gubernat, ducit $a b$ aetheriis terrena animalia signis: quae quamquam longo cogit summota recessu sentiri tamen, ut uitas ac fata ministrent
gentibus ac proprios per singula corpora mores. nec nimis est quaerenda fides: sic temperat arua caelum, sic uarias fruges redditque rapitque, sic pontum mouet ac terris immittit et aufert: atque haec seditio pelagus nunc sidere lunae 90 mota tenet nunc diuerso stimulata recessu, nunc anni spatio Phoebum comitata uolantem;sic submersa fretis concharum et carcere clausa ad lunae motum uariant animalia corpus et tua damna, tuas imitantur, Delia, uires;
tu quoque fraternis sic perdis in oribus ora atque iterum ex eisdem repetis, quantumque reliquit aut dedit ille, refers et sidus sidere constas. denique sic pecudes et muta animalia terris, cum maneant ignara sui legisque per aeuum,

[^68]For truly, if this great framework were not for ever compact of allied parts, through all its order obeying a constituted overlord; if it were not that Wisdom rules all the wide treasury of the heavens; then neither would this earth of ours stand firm nor the stars move in their circles: the moving heavens would halt and stiffen and stand still, and the constellations would not keep their appointed courses : night would no longer flee before day and again put day to flight in alternation due. The rains would not feed the earth, nor the winds the air, nor ocean the teeming clouds, nor the rivers ocean, nor the sea the fountains. The sum of things would not abide equipoised in all its parts even as it was ordered by its just author ; who provided that the waters should never fail nor the earth sink nor the flying heavens quicken or make slow their course. The motion of the heavens conserves and not disorders their office. So surely do all things remain evenly ordered through all the universe and obey a guiding hand. This god, then, of whom I speak, who is the all-controlling Reason, gives the living creatures of earth an origin in the heavenly signs. Though these signs be far removed from us, yet does he so make their influences felt, that they give to nations their life and their fate and to each man his own character. Nor need we seek overmuch for a sign of this: when we see how the sky tempers the soil, how it gives and takes away the various fruits of the earth, how it stirs the sea, sending it upon the land and again withdrawing it. And this uneasy temper possesses the sea owing to the influence now of the shining of the moon, now of the moon's withdrawal to an opposite part; and yet again it follows on the yearly swift course of the sun. We see, too, that animals submerged in the sea and imprisoned in shells, change their form under the influence of the moon's motion, imitating thee, Delia, in thy waning, thee in thy strength. Thou too, as we see, dost lose thy countenance in the countenance of thy brother and once more dost regain it from the same source. So much of light as he fails to give, or gives, thou dost reflect, thy star steadfast unto his. And lastly, we see that beasts and dumb creatures, though they remain

[^69]
## MANILI

natura tamen ad mundum reuocante parentem attollunt animos caelumque et sidera seruant corporaque ad lunae nascentis cornua lustrant uenturasque uident hiemes, reditura serena: quis dubitet post haec hominem coniungere caelo? 105 consilium natura dedit linguamque capaxque ingenium uolucremque animum, quem denique in unum descendit deus atque habitat seque ipse requirit. mitto alias artes, quarum est permissa facultas, infidas adeo nec nostri munera census,
mitto, quod aequali nihil est sub lege tributum, quod patet auctores summi non pectoris esse, mitto quod 〈et〉 certum est et ineuitabile fatum, materiaeque datum est cogi, sed cogere mundo.
quis caelum posset nisi caeli munere nosse
et reperire deum, nisi qui pars ipse deorum est?
quisue hanc conuexi molem sine fine patentis signorumque choros ac mundi flammea tecta aeternum et stellis aduersus sidera bellum [ac terras caeloque fretum subiectaque utrisque]
cernere et angusto sub pectore claudere posset, ni tantos animis oculos natura dedisset cognatamque sui mentem uertisset ad ipsam et tantum dictasset opus, caeloque ueniret quod uocat in caelum sacra ad commercia rerum
et primas quas dant leges nascentibus astra? quis neget esse nefas inuitum prendere mundum et uelut in semet captum deducere in orbem? sed ne circuitu longo manifesta probentur, ipsa fides operi faciet pondusque fidemque.
nam neque decipitur ratio nec decipit umquam; rite sequenda uia est ueris accredita causis, euentusque datur, qualis praedicitur ante. quod fortuna ratum faciat, quis dicere falsum

for ever ignorant of themselves and of law, yet, recalled by nature to the sense of that universe which begat them, lift their minds and wait upon the heavens and the stars. They wash their bodies when the growing moon first shoots its horns, they watch the coming of the storm and the return of fair weather. How beholding this should one hesitate to link man with the heaven? Nature has given to him forethought and speech and apt intelligence and swiftness of spirit. Into him alone has God descended and dwells in him and seeks himself in man's seeking of him. I say nothing of other arts that are permitted to us, albeit uncertain, gifts beyond our competence. I pass by the fact that nothing is given to us perfect in law and order, that our guides, as is clear, are not men of all-surpassing mind. I pass by the fact that fate is sure and inevitable, and that it belongs to matter to endure,-and to the universe to exercise,-compulsion. But yet-who could avail to know the heavens except by the boon of heaven, who to find God save one that is himself a portion of the gods? Who could have surveyed and compassed in his narrow mind the great fabric of the boundless sky, the circling motions of the signs, the flaming bounds of the universe, the eternal war of the planets with the fixed stars [and the earth and sea that lie beneath the sky and all that lies under both sky and earth]-who indeed?-were it not in man's spirit nature had put these seeing eyes, directing to herself a mind one in kind with herself, unfolding to him all her mighty works ? who indeed, but that of heavenly origin is the mystery that ever calls us heavenward, to the fellowship of nature and to the primal laws which the stars ordain at our birth? It were impiety to take captive an unwilling universe and to bring it down in thraldom unto that earth which itself is.

But it is not meet with wandering words to seek credence for that which is manifest. Now shall the truth of things make plain the strength and truth that is in the workings of nature. For Reason neither deceives nor is deceived ever. We must follow duly in the way wherein true principle assures us against error. Then does the issue follow even as it was foretold. Shall a man dare call false

[^70]
## MANILI

audeat et tantae suffragia uincere sortis?
haec ego diuino cupiam cum ad sidera flatu
ferre, nec in turba nec turbae carmina condam, sed solus uacuo ueluti uectatus in orbe
liber agam currus, non occursantibus ullis
nec per iter socios commune gerentibus actus, $\quad 140$
sed caelo noscenda canam mirantibus astris
et gaudente sui mundo per carmina uatis;
uel quibus illa sacros non inuidere meatus notitiamque sui, minima est quae turba per orbem. illa fluit, quae diuitias, quae diligit aurum, imperia et fasces mollemque per otia luxum et blandis diuersa sonis dulcemque per aures affectum, ut modico noscenda ad fata labore. hoc quoque fatorum est, legem perdiscere fati. et primum astrorum uaria est natura notanda 150 carminibus per utrumque genus. nam mascula sex sunt, diuersi totidem generis sub principe Tauro. cernis ut auersus redeundo surgat in arcum? alternant genus et uicibus uariantur in orbem. humanas etiam species in parte uidebis:
nec mores distant. pecudum pars atque ferarum ingenium facient. quaedam signanda sagaci singula sunt animo, propria quae sorte feruntur. nunc binis insiste; dabunt geminata potentis per socium effectus; multum comes addit et aufert, 160 ambiguisque ualent, quis sunt collegia, fatis ad meritum noxamque. duos per sidera Pisces
et totidem Geminos nudatis aspice membris.
his coniuncta manent alterno bracchia nexu; dissimile est illis iter in contraria uersis;
par numerus; sed enim dispar natura notanda est. atque haec ex paribus toto gaudentia censu

[^71]that which fortune has made to be truth ? Shall he set himself against the verdict of so high an oracle ?

This theme am I fain with inspired breath to lift to the stars. Not in the crowd, nor for the crowd, will I build my rhyme. But alone I will drive my car at large in unencumbered course, where none shall meet me and none as I travel make his speed to bear me company. But I will speak secret things unto the heavens: the stars shall hear me and marvel : the song of its prophet shall make glad the universe. They also shall marvel unto whomsoever the stars have given it to know themselves and their holy motions. Few are they, few indeed, upon the earth. Swiftly pass and are gone those that love riches and gold and mastery and office, or soft ease and quiet days and subtle languorous music and sense of sweetness' stealing through the ears, who think with light labour to win to a knowledge of fate. No: to know the rule of fate comes by gift of fate.

First must my song mark clearly the differing nature of stars according to their sex. Six male are there; and the female, of whom the Bull is first, are of like number. Behold how the Bull, as he returns to his place, rises with his hinder quarters foremost and arches his form. The sex of the signs alternates, each different from its neighbour, through the whole circle of the Zodiac. Some thou wilt see to be of human form, and their temper not remote therefrom. Others will give to us the disposition of cattle and wild beasts. Certain of them are single signs, moving each in its own province alone. These must be marked and learned with care.

Consider now the double signs. Being doubled they will exercise upon us an influence powerful by reason of their allied condition. Much does either partner give to the other and take away: and the signs which exercise this joint sway are powerful to shape such destinies as hang undecided between good and evil. Behold, across the stars, the two Fishes, and the naked forms of the Twin Brothers. The Twins abide linked together, each with an arm about the other. The Fishes face opposite ways and travel in different directions. Both signs agree in being twofold: but they differ in their nature. Of the twin signs these, then, move rejoicing in undiminished bodily glory. signa duplicia (dupla $G$ ) et (sint et $L$, sint et quae $M$ ) biformia (biforma $G$ ) 159 unc $L$ potentes $L^{2} \quad 160$ addet $L^{2} M \quad 161$ ambiguis (-que om.) $G$ : ambiguusque $L \quad$ qui $M \quad 164$ conquicta $G \quad 166$ sedenỉ $M$
signa meant ; nihil exterius mirantur in ipsis amissumue dolent, quaedam quod parte recisa atque ex diuerso commissis corpore membris: ut Capricornus et intentum qui dirigit arcum iunctus equo; pars huic hominis, sed nulla priori. hoc quoque servandum est alta discrimen in arte; distat enim gemini duo sint duplicine figura. quin etiam Erigone binis numeratur in astris, nec facie, ratione duplex; nam desinit aestas, incipit autumnus media sub Virgine utrimque. idcirco tropicis praecedunt omnibus astra bina, ut Lanigero, Chelis Cancroque Caproque, quod duplicis retinent conexo tempore uires;
ut quos subsequitur Cancer per sidera fratres, ex Geminis alter florentia tempora ueris sufficit, aestatem sitientem prouehit alter, nudus uterque tamen, sentit quia uterque calorem, ille senescentis ueris, subeuntis at ille aestatis; par est primae sors ultima parti. quin etiam Arquitenens, qui te, Capricorne, sub ipso promittit, duplici formatus imagine fertur. mitior autumnus mollis sibi uindicat artus materiamque hominis; fera tergo membra rigentem excipiunt hiemem; †nunciamque in tempora signum. quosque Aries prae se mittit, duo tempora Pisces bina dicant; hiemem claudit, uer inchoat alter ; cum sol aequoreis reuolans decurrit in astris, hiberni coeunt cum uernis roribus imbres; utraque sors umoris habet fluitantia signa. quin tria signa nouem signis coniuncta repugnant, et quasi seditio caelum tenet: aspice Taurum clunibus et Geminos pedibus, testudine Cancrum

[^72]They have no strange sense of aught alien mixed with them, nor do they feel any grievous loss of aught of themselves; as certain signs do that have had part of them cut away and possess limbs joined to them from bodies of other sort; such as are Capricorn and he that conjoined with the horse stretches his bow and takes aim. That latter, indeed, hath one part man, but Capricorn none. This distinction, too, we must hold fast in our lofty science. It makes a difference whether two stars are twin or of compounded shape.

Note further that Erigone is reckoned among the double signs; she is not double by her form but according to reason. For with the middle of Virgo on this side summer ceases, on that autumn begins. All the tropical signs-the Ram, the Claws, the Crab, Capricorn-are preceded by double signs, for the reason that the double signs unite in themselves two seasons and so possess double powers. Thus, the Crab follows the twin brothers through the path of the stars: and of the Twins the one gives us still the flowery springtime, the other brings up the thirsty summer. Yet both are naked, for both feel heat, the one the heat of the failing spring, the other that of oncoming summer. The last degree of the one is as the first degree of the other. The Archer, moveover, who in himself gives the promise of thy coming, Capricorn, is double in shape as he moves through heaven. Mild autumn claims as his own so much of the Centaur as is smooth and shapely and of human fashion; but with his hinder parts, fashioned beastlike, he meets the cold of winter. . . . The two Fishes, whom Aries sends ahead of him, inform us of two seasons: the one of them closes winter, the other opens out spring. When the sun reapproaching runs his swift course through these watery signs, winter rains and vernal showers meet and mingle ; both moistures obtain at once in the floating Fishes.

Furthermore, three of the signs are allied in warfare with the other nine, and a kind of civil strife possesses the sky. The Bull, look you, rises with his hinder quarters, the Twins rise with their feet, the Crab with his shell ; while the

[^73] 199 clunibus $M^{1}$ ex corr.

## MANILI

surgere, cum rectis oriantur cetera membris :
ne mirere moras, cum sol auersa per astra aestiuum tardis attollat mensibus annum.
nec te praetereat nocturna diurnaque signa quae sint perspicere et propria deducere lege, non tenebris aut luce suam peragentia sortem. nam commune foret nullo discrimine nomen, omnia quod certis uicibus per tempora fulgent, [et nunc illa dies, nunc noctes illa sequuntur,] sed quibus illa parens mundi natura sacratas temporis attribuit partes statione perenni.
namque Sagittari signum rabidique Leonis et sua respiciens aurato uellere terga, tunc Pisces et Cancer et acri Scorpios ictu, aut uicina loco, diuisa aut partibus aequis, omnia dicuntur simili sub sorte diurna; cetera nec numero dissortia, nec uice sedis interiecta locis totidem nocturna feruntur. quin etiam sex continuis dixere diurnas esse uices astris, quae sunt a principe signo Lanigeri ; sex a Chelis nocturna uideri. sunt quibus esse diurna placet, quae mascula surgunt; feminea in noctem tutis gaudere tenebris.
quin nonnulla tibi nullo monstrante loquuntur, Neptuno debere genus: scopulosus in undis Cancer et effuso gaudentes aequore Pisces. sunt quae terrena censentur sidera sorte, princeps armenti Taurus regnoque superbus lanigeri gregis est Aries pestisque duorum praedatorque Leo et dumosis Scorpius aruis. sunt etiam mediae legis communia signa, 230 ambiguus terrae Capricornus, Aquarius undis,

20 nec $G \quad$ auersa Bullialdus : aduersa codd. 202 adtollat $L^{1} M$ 203 ante hunc u. lemma in codd. quae nocturna aut diurna (habeantur add. LM) praetereat Bonincontrius: praetereant codd. 204 lege] sorte Ven. 205 peragencia sorte M 207 cernis M 208 uersum seclusit Bentley: tunc $G^{1} \quad 209$ parens $G L^{2}:$ pars $L^{1} M$ sacratas Scaliger: sacrata e(st) codd. 210 adtribuit $L$ satione $M$ perenni $G$ : phenni $L$ : pentum $M \quad 21$ I sagittari $L^{2}$ : sagittarii $G L^{1} M$ rabidique $G$ : rapidique $L$ (i posterior cum ras.) $M \quad 213$ tunc Ven. : nunc codd. pisces et dett. : pisces (et om.) codd. et acri Scorpios Scaliger: et cancri scorpion codd. ${ }^{21} 4$ diuesa $M \quad 216$ dissortia Ellis: consortia codd. 219 astris Bentley: castris codd. 220 Chelis Bentley: libris GL: libra M 221 mascula om. M 222 in om. $L^{1} \quad 223$ ante hunc u. lemma in GM et marg. $L$ quae humana (humida $L M$ ) aut terrena aut comunia: spatium unius uersus reliquit $L$ quin Scaliger: quid $M$ : quod $G:$ uod $L$ tibi Lannoius: sibi codd. 224 inundus $M^{1} \quad 225$ aequore dett. : in aequore codd.
other signs rise upright. So marvel not at the sun's tarrying in summer, seeing that the signs through which with dragging months he bears up the summer part of our year rise with their hinder parts.

Omit not to note clearly and to deduce by true rule what signs are nocturnal, what diurnal. They are not those that accomplish their task by night and those that accomplish it by day. For in that case there would be no distinction of name, seeing that the signs shine in ordered succession to one another through all the hours, [some of them following upon the day some upon the night]. But nocturnal and diurnal signs are so according as Nature, the mighty parent of the universe, has assigned to them a sacred portion of time and a fixed place for ever in the heavens. The sign of the Archer and of the fierce Lion, the Ram that looks round ever to the golden fleece upon his back, the Fishes, the Crab, and the Scorpion of savage tooth, are all of them either pairs or else separated from one another by equal distances. And therefore all of them are called from this likeness diurnal signs. The other signs, which are like the diurnal signs in that they are numerically pairs and like them in that in position they are alternate pairs, fill the gaps left by the six diurnal signs: and are called nocturnal. Note further, that some have assigned the character of diurnal signs to the six consecutive signs, beginning with the Ram, the chief of all. The six signs beginning with the Claws they bid us regard as the nocturnal signs. Others again hold that the diurnal signs are the male signs. The female signs love the darkness which covers the deeds of night.

Some signs again proclaim without interpreter that they owe their origin to Neptune. The Crab towering up like a rock out of the sea, the Fishes revelling in the water which the Waterman pours for them. I Some signs are accounted as of terrene nature-the Bull, prince of the herd, the Ram rejoicing in his lordship over the woolbearing flock; the bane and despoiler of them both, the Lion; and the Scorpion that haunts the thicket of the field. There are also signs of middle condition belonging to a mixed dispensation, Capricorn that seems doubtfully to belong to earth, Aquarius a suspect denizen of the

[^74]
## MANILI

[pars est prima nocens fundentis semper Aquari ; ] umida terrenis aequali lege remixta.
non licet a minimis animum deflectere curis, nec quicquam rationis eget frustraue creatum.
fecundum est proprie Cancri genus acer et ictu Scorpios et partu complentes aequora Pisces. sed sterilis Virgo est simili coniuncta Leoni; nec capit aut captos effundit Aquarius ortus. inter utrumque manet Capricornus corpore mixto, 240 et qui Cretaeo fulget Centaurus in arcu, communisque Aries aequantem tempora Libram et Geminos Taurumque pari sub sorte recenset.
nec tu nulla putes in eo commenta locasse naturam rerum, quod sunt currentia quaedam,
ut Leo et Arquitenens Ariesque in cornua tortus: aut quae recta suis librantur stantia membris, ut Virgo et Gemini fundens et Aquarius undas: uel quae fessa sedent pigras referentia mentes, Taurus depositis collo sopitus aratris,
Libra sub emerito considens orbe laborum, tuque tuo, Capricorne, gelu contractus in astris. quaeue iacent, Cancer patulam distentus in aluum, Scorpios incumbens plano sub pectore terrae, in latus obliqui Pisces semperque iacentes.
quod si sollerti circumspicis omnia cura, fraudata inuenies amissis sidera membris. Scorpios in Libra consumit bracchia, Taurus succidit in curuo claudus pede, lumina Cancro desunt, Centauro superest et quaeritur unum. sic nostros casus solatur mundus in astris exemploque docet patienter damna subire, omnis cum caelo fortunae pendeat ordo, ipsaque debilibus formentur sidera membris.
temporibus quoque sunt propriis pollentia signa: ${ }^{265}$

[^75]waters. [The first degree of the Water-carrier ever pouring water is hurtful.] In these the elements of water and earth are mixed in equable distribution.

We must not turn our minds away even from things of least note. Nothing is without reason, nor in vain created. The Crab and his kind are, as in their own right, prolific ; so also the fierce Scorpion and the Fishes whose spawn fills the sea. But the Maid is sterile, and next neighbour to a sterile Lion : nor does the Water-carrier receive seed into him, nor bring forth. Midway between the two estates is the twy-formed Capricorn and the Centaur with his shining Cretan bow. The Ram, too, is of the middle condition, and he counts as partners in his lot the Balance that weighs evenly the seasons, the Twins, the Bull.
/Dream not that it is without contrivance of nature that some signs are runners-as the Lion, the Archer, and the Ram that twists his neck on to his horns: that some stand straight-poised on steady limbs, as the Maid, the Twins, and the Water-carrier with his pot; that some sit in weary posture, the reflex of a tired mind,-as the Bull that, relieved of the plough, disposes his neck to sleep, the Balance that sinks down having discharged the cycle of his tasks, Capricorn that huddles himself frozenly together with all his stars ; that others, again, lie down,-as the Crab sprawling with distended belly, the Scorpion dropping down on the earth and resting his smooth front upon it, the Fishes swimming slant-wise, ever prone.

Again, if you survey all the signs with wise industry, you will find stars that are maimed and have lost this or that limb. The Scorpion has lost his claws in the Balance, the Bull sinks down lame with crooked leg, no eyes has the Crab, one eye has the Centaur still but one he has lost. So does the universe, by showing us the stars, console our ills, and by heavenly example teach us patiently to bear our earthly losses. For all the order of our fortunes is dependent on the skies, and the very stars themselves have bodies misshapen and warped./

The signs also have their proper seasons wherein they hold sway. Summer begins with the Twins, autumn with

[^76]
## MANILI

aestas a Geminis, autumnus Virgine surgit, bruma Sagittifero, uer Piscibus incipit esse. quattuor in partes scribuntur sidera terna, hiberna aestiuis, autumnis uerna repugnant.
nec satis est proprias signorum noscere formas; consensu quoque fata mouent et foedere gaudent atque aliis aliae succedunt sorte locoque. circulus extremo signorum ut clauditur orbe, in tris aequalis discurrit linea ductus inque uicem extremis iungit se finibus ipsa, et quaecumque ferit, dicuntur signa trigona, in tria partitus quod ter cadit angulus astra, quae diuisa manent ternis distantia signis. Laniger ex paribus spatiis duo signa, Leonis atque Sagittari, diuerso conspicit ortu.
Virginis et Tauri Capricorno consonat astrum. cetera sunt simili ratione triangula signa per totidem sortes distant quae condita mundo. sed discrimen erit, dextris $\dagger$ seu causa $\dagger$ : sinistra quae subeunt; quae praecedunt, dextra esse feruntur. 285 dexter erit Tauro Capricornus, Virgo sinistra: hoc satis exemplo est. at quae diuisa quaternis partibus aequali laterum sunt condita ductu, quorum designat normalis uirgula sedes, haec quadrata ferunt: Libram Capricornus et illum 290 conspicit hinc Aries, atque ipsum a partibus aequis Cancer, et hunc laeua subeuntis sidera Librae. semper enim dextris censentur signa priora. sic licet in totidem partes diducere cuncta ternaque bis senis quadrata effingere signis, quorum proposito reddentur in ordine uires.
sed si quis contentus erit numerasse quadrata, diuisum 〈ut〉 signis mundum putet esse quaternis, aut tria sub quinis signis ornare trigonum,

[^77]the Maid, winter with the Archer, spring with the Fishes. Three signs are assigned to each of the four divisions of the year. The winter signs are at strife with the summer ones, the vernal with the autumnal.

It is not sufficient to know the configurations peculiar to individual signs. They make alliances one with another and gladly confederate themselves, controlling so our destinies, and aid other signs, now these, now those, according to their position and assignment. / At the last point in the Zodiac, where its course closes, the line of the Circle runs off into three equal straight lines and joins itself to three points in the circumference which are each the furthest point possible from one another. Whatever signs it strikes are called triangular because an angle is thrice made, and is assigned to three stars which remain separated from one another by three intervening signs. The Ram beholds the two signs of the Lion and the Archer, signs equidistant from him and rising on opposite sides of him. The signs of the Maid and the Bull are in concert with Capricorn. The other triangular signs are ordered upon the same principle: they have their fixed place in the heaven at distances separated by the same number of degrees. But it will make a difference if the signs are classed as right signs : left signs are those that follow : those that precede are called right signs. Capricorn is a right sign to the Bull, the Maid a left sign. / This may suffice for an example. But those signs which, divided into sets of four, are stationed on an equilateral figure, and whose places are mapped out by perpendicular lines-these signs they call quadrangular. Capricorn gazes on the Balance, the Ram on Capricorn, the Ram himself at an equal distance is beheld by the Crab, and the Crab by the stars of the Balance that follows him on the left ; for signs that precede are always classed as right signs. Thus it is possible to distribute all the signs into like divisions, and of the twelve to fashion three squares. Of these squares I will expound the influences in order due.

If a man is content to reckon squares in such a way as merely to suppose the sky divided according to sets of four signs, or to suppose that any three signs divided according to sets of five make a triangle-hoping thus to attain the

[^78]
## MANILI

ut socias uires et amicos exigat ortus
foederaque inueniat mundi cognata per astra, falsus erit. nam quina licet sint undique signa, qui tamen ex signis, quae quinto quoque feruntur astra loco, fuerint nati, sentire trigoni non poterunt uires, licet illud nomine seruent ;
amisere loco dotes numerisque repugnant. nam cum sint partes orbis per signa trecentae et ter uicenae, quas Phoebi circuit ardor, tertia pars eius numeri latus efficit unum in tris perducti partes per signa trigoni.
hanc autem numeri non reddit linea summam, si signum a signo, non pars a parte notetur. quod quamuis duo sint ternis dirimentibus astra, si tamen extremam laeui primamque prioris inter se conferre uoles numerumque notare,
ter quinquagenas implebunt ordine partes;
transibit numerus formam finesque sequentis consumet ductus. licet ergo signa trigona dicantur, partes non seruant illa trigonas. haec eadem species fallet per signa quadrata; quod cum totius numeri, qui construit orbem $\dagger$ ter triginta $\dagger$ quadrum partes per sidera reddant, euenit ut prima signi de parte prioris
si partem ad summam ducatur uirga sequentis bis sexagenas faciat; sin summa prioris
et pars confertur subeuntis prima, duorum signorum in medio numerum transitque refertque; triginta duplicat partes, pars tertia deerit; et quamuis quartum a quarto quis computet astrum, naufragium facient partes unius in ipsis.
non igitur satis est signis numerasse trigona
quadratiue fidem caeli per signa quaterna.
quadrati si forte uoles effingere formam, partibus aut trinis facies cum membra trigoni,

[^79]alliance and friendly influence of these figures and to discover in related stars the bonds of the universe-that man will be deceived. For even though you get in every case sets of five signs, yet the men that are born from signs placed each in the fifth place, will not be able to feel the influence of a triangle, though they may speak of a triangle. They have lost their lot owing to an error in position, and their numbers will be at fault. For there are 360 divisions of the world traversed by the burning sun : and a third of that number goes to a single side of a triangle drawn through the signs. But your line does not give you this number if it be drawn merely from sign to sign and not from division to division. Because, although you may have two stars separated by three intervening stars, yet if you care to connect the last point of the left star and the first point of the preceding star and to count the number of divisions, the two points will give you a total of 150 divisions. The number, that is, will be too great for the form and will encroach upon the territory of the line that follows. And so, though you may speak of triangles, your figures will not sustain the part of triangles.
/ The same deception will meet you in the quadrangular figures. Of the total number of degrees which make up the Zodiacal Circle ninety give you the side of your starry square. But you find that if your line be drawn from the first degree of the preceding sign to the last degree of the following sign you get a result of 120 degrees. And again, if you join the last degree of the preceding and the first degree of the following sign, your line both omits and gives to you the number of degrees of the two signs between its two points : that is to say, it gives you twice thirty degrees, but the third set of thirty degrees will be wanting : and however much one may count from a given sign to the fourth sign from it, the degrees in their own adding will make shipwreck of a whole sign. It is therefore not enough to reckon triangles by drawing your line from sign to sign, nor to reckon a square as true and just if its line includes four heavenly signs. / If you should wish to construct the outline of a square, or think to represent the figure of an equilateral triangle, for the triangle you must add to a

[^80]
## MANILI

hic poscit quintam partem centesima summa, $\quad 335$ illic amittit decimam. sic conuenit ordo. et quiscumque quater iunctus fauet angulus usque, quaeque loca in triplici signarit linea ductu, cum signata uiae linquet dispendia recta, his natura dedit communi foedera lege inque uicem affectus et mutua iura fauoris. quocirca non omnis habet genitura trigonis$34^{2}$
consensum signis, nec cum sunt forte quadrata, ..... 345
continuo inter se seruant commercia rerum.
distat enim, partes consumat linea iustas, detractetne modum numeri, quem circulus ambit, nunc tris efficiat, nunc quattuor undique ductus, quos in plura iubet ratio procedere signa interdum, quam sunt numeris memorata per orbem. sed longe maior uis est per signa trigoni quam quibus est titulus sub quarto quoque quadratis. altior est horum summoto linea templo, illa magis uicina meat caeloque recedit,355
et propius terras accedit uisus eorum
aeraque infectum nostras demittit ad auras.
quin dubia alternis data sunt commercia signis mutua nec magno consensu foedera seruant, inuita angusto quod linea flectitur orbe. 360 nam cum praecludens formatur singula limes sidera, et alterno deuertitur angulus astro, sexque per anfractus curuatur uirgula in orbem, a Tauro uenit in Cancrum, tum Virgine tacta Scorpion ingreditur, tum te, Capricorne, rigentem 365 et Geminos a te Pisces auersaque Tauri sidera contingens finit qua coeperat orbem. alterius ductus locus est per transita signa, utque ea praetereas quae sunt mihi singula dicta,

[^81]hundred its fifth part, for the square subtract from the same number its tenth part. So do you get a true apportionment. And thus for all the signs which the quadrangle touches with ever-favouring aspect, and for all those points which the line of the Circle traverses in its threefold course, after it leaves by a straight path the trodden devious path of the circumference, for all these Nature has established a covenant and a law in common and mutual sympathy and rights of friendship one with another. And so not every triangular nativity has affinity with the signs of its triangle, nor do signs which happen to be quadrangular necessarily on that account preserve community of interests. For it makes a difference whether the line exhaust the proper tale of degrees or refuse the full number which the Zodiac contains; or, again, issue in lines, now three, now four, which logic, as may happen, compels to continue themselves into more signs than are allowed for in the Zodiac by the number of its degrees. But the influence which radiates through the signs of a triangle is far greater than that which resides in those signs which, from their position as fourth signs to one another, are called square. The line of the square is higher, its compass further removed from earth. The line of the triangles travels nearer to us and is more remote from heaven: their vision ranges nearer earth and sends down to our air the infection of theirs.
c Between alternate signs, furthermore, there subsists but doubtful friendship, nor do they hold fast in enduring concord the tie that binds each to each. For the line that traverses them is carried round reluctant in cramped circuit. One line is formed in such a way that it passes by the unalternate constellations while its angle enters in at alternate signs. The line winds with six bends round the circle. From the Bull it travels to the Crab, then traversing the Maid enters Scorpion : anon it touches thee, cold Capricorn, and after thee the Fishes and the stars of the Bull averse ; and so ends its circle whence it began. The track of the other line is through the signs which the first omitted. A circle is formed like to the previous one, with the same number of angles, but so formed that you omit, in following it,

[^82]
## MANILI

flexibus ex totidem similis fit circulus illi.
transuersos igitur fugiunt subeuntia uisus, quod nimis inclinata acie limisque uidentur uicinoque latent: ex recto certior ictus. tertia $\dagger$ conuerso $\dagger$ conduntur signa recessu, et quia succedit conuexo linea caelo,
singula circuitu quae tantum transeat astra, uisus eis procul est altoque uagatur Olympo et tenuis uires ex longo mittit in orbem. sed tamen est illis foedus sub lege propinqua, quod non diuersum genus est $\dagger$ quod euntibus astris $\dagger, 380$ mascula sed maribus respondent, cetera sexus feminei secum iungunt commercia mundi. sic quamquam alternis paret natura figuris, et cognata iacent generis sub legibus astra.
iam uero nulla est haerentibus addita signis
gratia; nam consensus, hebet quia uisus, ademptus.
in seducta ferunt animos, quae cernere possunt. sunt etiam aduersi generis conexa per orbem mascula femineis semperque obsessa uicissim : disparibus non ulla datur concordia signis. $39^{\circ}$
sexta quoque in nullas numerantur commoda uires, uirgula per totum quod par non ducitur orbem, sed duo signa ferit mediis summota quaternis, tertius absumpto ductus non sufficit orbe. at quae diuersis ex partibus astra refulgent per medium aduerso mundum pendentia uultu et toto diuisa manent contraria caelo, septima quaeque loco quamuis submota feruntur, ex longo tamen illa ualent uiresque ministrant uel bello uel pace suas, ut tempora poscunt,

370 ex Ellis: et codd. fit dett. : sit $L^{2}:$ it $G:$ in $L^{1} M$ circulis $L^{1}$ cum ras. illi Fayus: illis (in ras. L) codd. 371 sub euntia (sub euin ras.) $L \quad 372$ nemis (e ex ras. $L$ ) $L M$ inclinata $M$ : inclinat $G$ : in clinat $L \quad$ acie Breiter (aciem iam Bentley): cue $M$ : anne $G L^{1}$ : acne $L^{2}$ 374 conuerso $G L$ : cūuerso $M \quad 375$ quia $M$ : quae $G L^{2}: q . L^{1} \quad 377$ uisus Ven. : uis GLM : eis Bentley: eius codd. uagatur dett.: uagantur (-er $L^{1}$ ) codd. 379 foedus Scaliger: foeb' $M$ : phoebus $G$ : pheb; $L$ 380 est om. $G \quad 382$ secum iungunt Bentley : se coniungunt codd. $\quad 3^{83}$ $\begin{array}{lll}\text { quanquam Bentley : quicquam codd. alternis dett. : alterius codd. } & 384\end{array}$ iacet $L^{1} \quad 385$ ante hunc $u$. lemma in $G, L$ marg. et $M$ de inconiunctis (coniunctis $L$ ) signis et quae $\mathrm{VI}^{\circ}$ loco sunt (sint $L M$ ) herentibus codd. 386 hebet Scaliger: habet codd. Ita interpunxi: uulgo leuiter post hebet interpungitur adeptus $M \quad 387$ in seducta Bentley: inseducta $M$ : inse ducta $G L$ : in se ducta Ven. possint $G$ 388 connexa $G$. 390 $\overline{\text { ñ nulla } M} 39 \mathrm{I}$ quoq; $\overline{\text { ñnullas }} M 392$ par Scaliger: pars codd. dicitur ducitur (linea per dicitur ducta) M 393 ferit Bentley: ferunt $M$ : fecit $L$ :
what I have called the unalternate signs. Alternate signs therefore elude the transverse gaze one of another, even in the act of meeting it. Each is obscured to his neighbour, being seen with crooked eye and vision painfully straining round a corner. Sight hits its object more surely in a straight direction. Signs separated by one intervening sign retire and hide themselves in the . . . Zodiacal Circle: and because their line approaches near to the concave heaven, in such a way as just to pass by the unalternate stars, their vision is distant from earth and wanders high in Olmypus, and the influence which the line transmits to our world is from far away and slender. Nevertheless, there subsists among them, owing to their affinity of sex, an alliance. For they are not of different sex, . . . but the male signs are in concert with one another : and the others, the female signs, form together also a fellowship in the heavens. And so the laws of nature are seen working even in stars of alternate configuration, and constellations united by sex lie under the law of their sex.

But among neighbouring stars there is found no goodwill. / For since they have but faint sight of one another the sense of one purpose is taken from them. They fix their hearts on stars removed from them and visible to them. Moreover, these signs are of different sex, male having their place in the Circle next to female, each ever exposed to attack from its neighbour. Between signs that are thus opposed there is no peace.

Similarly, signs separated by four intervening signs are accounted useless for any union of influence. Their line cannot be carried in equal parts through the whole circle ; it strikes two signs that are separated by four, but its third track fails, finding the Circle exhausted.

Signs which shine upon one another from diametrically opposed quarters, that hang with countenances fronting one another across the midline of the heaven, in abiding opposition, separated by the whole sky-these, although they move at great distance from one another, with five stars intervening, yet have influence together even from afar, and minister to one another aid in peace and in war, as


## MANILI

nunc foedus stellis nunc et dictantibus iras. quod si forte libet quae sint contraria signa per titulos celebrare suos sedesque, memento solstitium brumae, Capricornum opponere Cancro, Lanigerum Librae-par nox in utroque diesque-, Piscibus Erigonen, Iuuenique Vrnaeque Leonem; Scorpios e summo cum fulget, Taurus in imo est, et cadit Arquitenens Geminis orientibus orbi.
[hos seruant inter sese contraria cursus.] sed quamquam aduersis fulgent contraria signis, 410 natura tamen interdum sociata feruntur et genere: exemplis concordia mutua surgit mascula si paribus, uel si diuersa suorum respondent generi ; Pisces et Virginis astra aduersi uolitant ; sed amant communia iura,
et uincit natura locum ; sed uincitur ipsa temporibus, Cancerque tibi, Capricorne, repugnat, femina femineo, quia brumae dissidet aestas, hinc rigor et glacies niuibusque albentia rura, hinc sitis et sudor, nudusque in solibus orbis, aestiuosque dies aequat nox frigida brumae. sic bellum natura gerit, discordat et annus, ne mirere in ea pugnantia sidera parte. at non Lanigeri signum Libraeque repugnat in totum, quia uer autumno tempore differt, fructibus hoc implet maturis, floribus illud, sed ratione pari est aequatis nocte diebus, temporaque efficiunt simili concordia textu permixtusque dies mediis hiemem inter et aestum articulis uno seruantia tempore utrumque, quo minus infesto decertent sidera bello. [talis erit ratio diuersis addita signis.]


## ASTRONOMICON II

occasion calls, according as the stars in heaven proclaim now wrath, now amity./ If you desire to recount the names and positions of the opposed signs, then remember to range the summer solstice over against the winter, Capricorn against the Crab, the Ram against the Balance -in these two night and day are equal-Erigone against the Fishes, the Lion against the Lad with the Urn. When the Scorpion shines from the height of heaven, the Bull is in the depth. The Archer sinks as the Twins rise to their place in the Circle. [These are the motions which the contrary signs conserve among themselves.] Yet though they shine with ensigns opposed, yet ever and anon they are borne along in alliance because of a natural tie of sex ; a harmony of spirit comes to them in so far as male acts in concert with its like, or female again with those of its own sex. The Fishes and the stars of the Maid move in their swift flight with opposed fronts : yet they have rights in common which they cherish, and the tie of nature is stronger than that of place. Yet even this tie is broken by consideration of seasons. Cancer is at strife, Capricorn, with thee, female sign with female, for the reason that summer and winter are sworn foes: from Capricorn comes cold and ice and a snow-whitened countryside; from Cancer thirst and sweat, and a world all dry and bare under the hot suns ; and the cold winter night is as long as the summer day. Thus does nature make war, and thus is the year at strife: nor need you marvel if stars so situate in heaven contend together. But the signs of the Ram and the Balance are not-because autumn and spring differ, because spring fills the earth with flowers, autumn with fruits-they are not on that account utterly at variance, but they are at unison in the principle of their being, which is that each makes the night equal to the day : and the like texture of their two seasons and their mildly compounded temperature, lying as they do at points midway between summer and winter, and so preserving both seasons in their own season,-all this brings it about that these two signs do not contend in fierce war. [Such will be the principle assigned for the relations of different stars.]

[^83]
## MANILI

his animaduersis debes, quae proxima cura, noscere tutelas adiectaque numina signis, et quae quoique deo rerum natura dicauit, cum diuina dedit magnis uirtutibus ora condidit et uarias sacro sub nomine uires, pondus uti rebus persona imponere possit. Lanigerum Pallas, Taurum Cytherea tuetur, formosos Phoebus Geminos; Cyllenie, Cancrum, Iuppiter et cum matre deum regis ipse Leonem, spicifera est Virgo Cereris, fabricataque Libra Vulcani, pugnax Mauorti Scorpios haeret; uenantem Diana uirum, sed partis equinae, atque angusta fouet Capricorni sidera Vesta :
ex Iouis aduerso Iunonis Aquarius astrum est, agnoscitque suos Neptunus in aequore Pisces. hinc quoque magna tibi uenient momenta futuri. cum ratio tua per stellas et sidera curret, argumenta petes omni de parte uiasque artis, ut ingenio diuina potentia surgat, exaequentque fidem caelo mortalia corda. accipe diuisas hominis per sidera partes singulaque in propriis parentia membra figuris, in quis praecipuas toto de corpore uires
exercent. Aries caput est ante omnia princeps sortitus, censusque sui pulcherrima colla Taurus, et in Geminos aequali bracchia sorte scribuntur conexa umeris, pectusque locatum sub Cancro est, laterum regnum scapulaeque Leonis; 460 Virginis in propriam descendunt ilia sortem; Libra regit clunes, et Scorpios inguine gaudet ; Centauro femina accedunt, Capricornus utrisque imperitat genibus, crurum fundentis Aquari arbitrium est, Piscesque pedum sibi iura reposcunt.

[^84]Now is it right that having duly noted all these things, you should next in order apply your mind to learning what are the tutelary deities set over each sign, what sign nature allotted to each of the Gods on that day when she gave divine forms to the great virtues, and under holy names established manifold influences and caused a living presence to lend majesty to that wherein it dwells. Pallas protects the Ram, Cytherea the Bull, Phoebus the beauteous Twins. Thou, Mercury, dost rule the Crab, and thou, Jupiter thyself, together with the Mother of the Gods, the Lion. The Maid that carries the sheaf belongs to Ceres, and the metal-wrought Balance to Vulcan; the fierce Scorpion cleaves unto Mars. Diana hath a kindness to the huntsman that is half horse, and Vesta to the huddled fires of Capricorn. Aquarius, opposite Jove's sign, is the sign of Juno. Neptune knoweth his own Fishes, beholding them in the sea. From these facts also you will derive principles of great import for the knowledge of the future. When your reason passes swiftly through both planets and signs, on this hand and on that you will need to seek the way of proof and the path of knowledge, that the divine power may rise and reveal itself to thought, and that the hearts of men may have a faith sure as the heavens are sure.

Learn now how the parts of the human body are distributed among the signs, and behold each member plainly allocated to its own constellation. In the parts of the body so distributed the signs exercise the powers which concern that part, out of the whole body, which belongs to them. The Ram, chief of the signs, has for his special province the head; the beauty of the human neck falls within the arbitrament of the Bull; the two arms, with shoulders conjoined, are assigned in equal division to the Twins ; the breast is placed under the Crab, the Lion holds sway over the sides and back. The loins come down to the Maid as her proper lot. The Balance governs the buttocks, the Scorpion has his glory in the genitals, the thighs are subject to the Centaur, Capricorn is lord of both the knees, the legs are in the power of the Water-carrier, and the Fishes claim for themselves the governance of the feet.

[^85] codd. aquarii $G$

## MANILI

quin etiam propriis inter se legibus astra conueniunt, ut certa gerant commercia rerum ; inque uicem praestant uisus atque auribus haerent, aut odium foedusue gerunt, conuersaque quaedam in semet proprio ducuntur plena fauore.
idcirco aduersis nonnumquam gratia signis, et bellum sociata gerunt, alienaque sede inter se generant coniunctos omne per aeuum, at triquetris orti pugnant fugiuntque uicissim : quod deus, in leges mundum cum conderet omnem,
affectus quoque diuisit uariantibus astris atque aliorum oculos, aliorum contulit aures, iunxit amicitias horum sub foedere certo, cernere ut inter se possent audireque quaedam, diligerent alia et noxas bellumque mouerent,
his etiam propriae foret indulgentia sortis, ut se diligerent semper sibique ipsa placerent: sic ut naturas hominum plerasque uidemus, qui genus ex signis ducunt formantibus ortus. consilium ipse suum est Aries, ut principe dignum est ; 485 audit se Libramque uidet, frustratur amando Taurum, Lanigero qui fraudem nectit et ultra fulgentis uidet atque audit per sidera Pisces; Virgine mens capitur; sic quondam uexerat ante Europam dorso retinentem cornua laeua indutusque Ioui <est〉. Geminorum ducitur auris ad Iuuenem aeternas fundentem Piscibus undas inque ipsos animus Pisces oculique Leonem. Cancer et aduerso Capricornus conditus astro in semet uertunt oculos, in mutua tendunt auribus, et Cancri captatur Aquarius astro. at Leo cum Geminis aciem coniungit et aurem Centauro gemino, Capricorni diligit astrum. Erigone Taurum spectat, sed Scorpion audit

[^86]Certain signs, furthermore, have agreement one with another, according to laws of their own individuality: and sustain a fixed fellowship. They direct their gaze on one another and hang their hearing on each other's speech; they bear hate or love to one another. Some of them turn their regard upon themselves, and are drawn to themselves by the fullness of their own attraction. Sometimes there is love among opposed signs, and they wage war in alliance one with another ; signs, which by position have no common tie, join men at birth in a friendship that never dies; while men born under the signs of the same triangle, contend with and shun one another. The cause of this lies in God, who, when he placed all his universe under law, also appointed for the stars feelings of their own whereby they differ. He brought together the eyes of some, the ears of others: some he joined in the bonds of enduring friendship. And thus it is that certain of them behold or hear one another; others love or bear spite and wage war. Others, yet again, are overkind to that which is of themselves, ever in love with themselves, and pleasing in their own eyes. And we see the same law at work in the moods of wellnigh all mankind: for they derive their character from the stars that build their nativity. The Ram hearkens to his own counsel, as becomes a leader. He hears himself, and beholds the Balance, and loves the Bull with a baffled love. For the Bull weaves guile for the Ram, and beyond the Ram sees the Fishes shining and hearkens to them across the Ram's stars. His heart is caught with love of the Maid. Aforetime, in days long ago, he carried her upon his back-she was Europa, and her left hand held his horns, and his form was a covering for the form of Jove. The ears of the Twins are directed to the lad that for ever pours out water for the Fishes, their heart is directed towards the Fishes themselves, their eye to the Lion. The Crab, and Capricorn, whose star is established over against him, turn their eyes upon themselves, their ears strain towards one another, and the Crab bears hate towards the Water-carrier. But the Lion sees eye to eye with the Twins and hearkens to the double Centaur, and loves the sign of Capricorn. Erigone beholds the Bull ; but she hears the Scorpion, and she is fain to

[^87]
## MANILI

atque Sagittifero conatur nectere fraudem. 500
Libra suos sequitur sensus solumque uidendo
Lanigerum atque animo complexa est Scorpion infra.
ille uidet Pisces oditque per omnia Libram.
nec non Arquitenens magno parere Leoni
auribus atque oculis sinum fundentis Aquari
conspicere adsueuit solamque ex omnibus astris
diligit Erigonen. contra Capricornus in ipsum
conuertit uisus-quid enim mirabitur ille
maius, in Augusti felix cum fulserit ortum ?auribus et summi captat fastigia Cancri.
at nudus Geminis intendit Aquarius aurem sublimemque colit Cancrum spectatque reducta tela Sagittiferi. Pisces ad Scorpion acrem direxere aciem cupiuntque attendere Taurum. has natura uices tribuit cum sidera fixit.
his orti similis referunt per mutua sensus, audire ut cupiant alios aliosque uidere, horum odio, nunc horum idem ducantur amore, illis insidias tendant, captentur ab illis.
quin etiam ipsa meant aduersa trigona trigonis,
alteraque in bellum diuerso limite ducit
linea; sic ueri per totum consonat ordo.
namque Aries, Leo et Arquitenens, sociata trigono signa, negant Chelis foedus totique trigono,
quod Gemini excipiunt fundens et Aquarius undas; 525 idque duplex ratio cogit uerum esse fateri, quod tria signa tribus signis contraria fulgent, quodque aeterna manent hominum bella atque ferarum; humana est facies Librae, diuersa Leonis; idcirco et cedunt pecudes, quod uiribus amplis
consilium est maius; uictus Leo fulget in astris, aurea Lanigero concessit sidera pellis;
ipse ferae partis Centaurus tergore cedit. usque adeo est homines uictis quod mirer ab illis nascentis Librae superari posse trigono?

[^88]devise harm for the Archer. The Balance follows his own counsel ; with his sight he encompasses only the Ram, and with his heart the Scorpion below him. The Scorpion sees the Fishes: and hates wholly the Balance. The Archer has learnt to obey with his ears the mighty Lion, with his eyes to behold the Urn of the Water-carrier; and he loves, of all the stars, only Erigone. Not so Capricorn : he turns his gaze upon himself-what fairer or more awful sight could he hope to gaze upon, seeing that it was he that shone happily on the rising of Augustus? With his ears he assails the prominences of the towering Crab. The naked Watercarrier strains his ear to hear the Twins: he loves the huge Crab and gazes at the drawn bow of the Archer. The Fishes turn their eyes upon the fierce Scorpion, and are fain to hearken to the Bull. These are the relations one with another which nature established for the stars when she founded them. And men one with another reflect the dispositions of the stars whereof they are born. To some they love to listen, others they love to look upon, and are moved now by hate of these, now by love of those, for some spreading the nets of craft, themselves plotted against by others.

Furthermore, triangles as such move in opposition one to another. It is their alternate line that leads them to war along opposed paths: and thus the system of truth is harmonious in its every part. For the Ram, the Lion, and the Archer, which are signs allied in one triangle, have no peace with the Claws, and the whole triangle of the Clawsthe triangle which the Twins and the Water-carrier complete. And that this is according to reason a twofold consideration compels us to admit, for (I) in each triangle three signs are diametrically opposed to three signs; and (2) there still subsists in heaven the old war between men and the beasts. The form of the Balance is human, that of the Lion not human. And beasts yield to men because wisdom is mightier than much strength. The Lion shines among the stars because he was vanquished; and it was the loss of his golden fleece that gave to the Ram his place among the signs. The Centaur himself, in so far as he has the hinder parts of a horse, is inferior to man. Is there, then, reason why I should marvel that men born under these conquered signs can be vanquished by the triangle of the

[^89]
## MANILI

[quin etiam breuior ratio est per signa sequenda.]
nam quaecumque nitent humana condita forma astra, manent illis inimica et uicta ferarum.
sed tamen in proprias secedunt singula mentes
et priuata gerunt secretis hostibus arma.
Lanigero genitis bellum est cum Virgine natis et Libra et Geminis et si quos protulit Vrna.
in partus Tauri sub Cancro nata feruntur pectora et in Chelis et quae dat Scorpios acer, et Pisces. at quos Geminorum sidera formant,
his cum Lanigero bellum est eiusque trigono. in Cancro genitos Capricorni semina laedunt et Librae partus et quos dat Virginis astrum quique sub auersi numerantur sidere Tauri. Lanigeri communis erit rabidique Leonis
hostis et a totidem bellum subscribitur astris.
Erigone Cancrumque timet geminumque sub arcu Centaurum et Pisces et te, $\dagger$ Capricorne, rigentem $\dagger$. maxima turba petit Libram: Capricornus et illi aduersus Cancer, Chelis quod utrumque quadratum est, 555 quaeque in Lanigeri numerantur signa trigonum. Scorpios in totidem fecundus creditur hostes, aequoreum Iuuenem, Geminos, Taurum atque Leonem, Erigonen, Libramque fugit metuendus et ipse. quique Sagittari ueniunt de sidere partus,
hos Geminis nati Libraque et Virgine et Vrna depressisse uolunt natura et lege iubente.〈quin etiam Tauri quae stellis signa minantur〉 $\quad 562^{a}$ haec eadem, Capricorne, tuis inimica feruntur. at quos aeternis perfundit Aquarius undis, in pugnam Nemeaeus agit totumque trigonum, turba sub unius Iunenis uirtute ferarum.
Piscibus exortos uicinus Aquarius urget et Gemini fratres et quos dat Virginis astrum,

[^90]Balance? [Moreover, we must follow a briefer way of reason through the signs.] For all the stars which shine fixed in heaven under human forms are still the foes and the conquerors of the beasts.

None the less individual signs follow diverse private moods of their own, and wage wars of their own with secret enemies. Those born under the Ram have war with those born under the Maid, the Balance, the Twins, and those sprung from the Urn of the Water-carrier. Men born under the Crab war with the offspring of the Bull, and so too those born under the Claws and the offspring of the fierce Scorpion and the Fishes. Those whose nativity the stars of the Twins shape-these have war with the Ram and his triangle. Upon those born under the Crab the offspring of Capricorn work havoc, and so too do the family of the Balance and those that belong unto the Maid and those that are assigned to the constellation of the averse Bull. The fierce Lion has the same foes as the Ram: and the same signs levy war upon both. Erigone fears the Crab and the double sign Archer-Centaur, and the Fishes fand thee, cold Capricorn $\dagger$. The Balance has the greatest number of enemies-they are Capricorn and Cancer, directly opposite to Capricorn, and both the squares which belong to the Claws, and the signs that are reckoned to the triangle of the Ram. The Scorpion is held to be prolific of an equal number of foes; he flees from the Water-carrier, the Twins, the Bull, the Lion, the Maid, and the Balance : and by all these is he himself feared. Those that are born of the constellation of the Archerupon them the offspring of the Twins and of the Balance and of the Maid and of the Urn are fain to press hard, for the very law of their nature bids them. 〈The signs, again, which threaten the sign of the Bull) these in like manner are accounted hostile to thee and thine, Capricorn. Those whom the Water-carrier drenches with his everflowing waters, them the Lion goads into battle, he and all his triangle : but, before the valour of that one lad, Lion and triangle are but a rout of wild beasts. Those born of the Fishes are attacked by the Water-carrier, by the

[^91]
## MANILI

quique Sagittari descendunt sidere nati．
nec sola est ratio，quae dat nascentibus arma
inque odium generat partus et mutua bella， sed plerumque manent inimica tertia quaeque
lege in transuersum uultu defixa maligno．
quippe manent quaecumque loco contraria signa， aduersosque gerunt inter se septima uisus，
tertia quaeque illis utriusque trigona feruntur：
ne sit mirandum，si foedus non datur astris， quae sunt aduersi signis cognata trigoni．
per tot signorum species contraria surgunt corpora totque modis quotiens inimica creantur．580
idcirco nihil ex semet natura creauit pectore amicitiae maius nec rarius umquam． unus erat Pylades，unus qui mallet Orestes ipse mori；lis una fuit per saecula mortis； ［alter quom raperet fatum，non cederet alter，$5^{8} 5$
et duo，qui potuere sequi．uix noxia poenis．］
optauitque reum sponsor non posse reuerti，
sponsoremque reus timuit，ne solueret ipsum．
perque tot aetates hominum，tot tempora et annos， tot bella et uarios etiam sub pace labores，
cum fortuna fidem quaerat，uix inuenit usquam．
at quanta est scelerum moles per saecula cuncta， quamque onus inuidiae non excusabile terris！593
〈quid loquar infectos fraterno sanguine fratres，〉 ..... $593^{\text {a }}$
uenalis ad fata patres matrumque sepulcra？ ..... 594
〈quid loquar ut subitam sceleratis gentibus olim＞ ..... $594^{\text {a }}$
imposuit Phoebus noctem，terrasque reliquit？ ..... 595
quid loquar euersas urbes et prodita templaet uarias pacis clades et mixta uenena，insidiasque fori，caedes in moenibus ipsiset sub amicitiae grassantem nomine turbam？in populo scelus est，et abundant cuncta furoris，600

[^92]Twins，by those born under the Maid，by those that are of the lineage of the Archer．

Nor is this the only cause which assigns enmities to men at their birth，and begets a race set upon hate and war with its neighbours；but mostly alternate signs are by unkind law for ever doomed fixedly to behold one another with wrathful sidelong looks：for when any two signs are estab－ lished in diametrically opposed places and，with five stars intervening，advance contrasted fronts，the signs which are separated by one from either of them form a triangle with the other．So that one need not be surprised if peace does not exist between stars that are connected with the signs of an opposed triangle．

As often as men are born hostile to one another，they come into the world opposed one to the other owing to these configurations of signs and in these combinations．There－ fore it is that nature has created out of herself nothing greater ever nor more rare than the heart of friendship． There was never but one Pylades，and but one Orestes fain to die for his friend．Once only in the world＇s ages have men striven at law for the possession of death ［when the one snatched at that prize of death which the other would not yield．Two only have availed to follow them．Scarce could Punishment find guilt．］Once only has ever surety prayed that the accused might fail to return， once only has the accused feared lest his surety should make him free．Through all the periods of man＇s life，all generations，all years，amid wars and amid the motley strife even of peace，when uncertain Fortune seeks certain Faith， scarce does she find it in the wide world．Yet how great in all the ages is the sum of crime，how great a load of guilt not to be put aside lies on the earth．〈Why should I tell of brothers stained with brothers＇blood $\rangle$ ，of fathers murdered for money，and the deaths of mothers？〈Why should I tell how of old＞Phoebus brought 〈sudden〉 night 〈on a world of men accursed＞，and fled from earth？Why tell of cities overturned，temples betrayed，a thousand disasters breaking man＇s peace，the mixing of poisons，plottings in the market－place，slaughter within the very walls of Rome， and bands that in the name of comradeship work riot？

[^93]
## MANILI

et fas atque nefas mixtum, legesque per ipsas saeuit nequities; poenas iam noxia uincit. scilicet in multis quoniam discordia signis corpora nascuntur, pax est sublata per orbem, et fidei rarum foedus paucisque tributum; utque sibi caelum, sic tellus dissidet ipsa, atque hominum gentes inimica sorte feruntur.
si tamen et cognata cupis dinoscere signa, quae iungant animos et amica sorte ferantur, Lanigeri partus cum toto iunge trigono. simplicior tamen est Aries meliusque Leone prosequitur genitos et te, Centaure, creatos, quam colitur. namque est natura mitius astrum expositumque suae noxae, nec fraudibus ullis, nec minus ingenio molli quam corpore constans.
illis est feritas signis praedaeque cupido, uenalisque animus non numquam excedere cogit commoditate fidem, nec longa est gratia facti, atque in Lanigeri partus sub utroque creatus non parcit sed rara gerit pro tempore bella: quod feritas utriusque magis quam iniuria cogit.
plus tamen in duplici numerandum est roboris esse, quoi commixtus homo est, quam te, Nemeaee, sub uno. idcirco et pax est signis et mixta querella. quin etiam Tauri Capricorno iungitur astrum, nec magis illorum coeunt ad foedera mentes. uirgineos etiam partus quicumque creantur Tauro complecti cupiunt, sed saepe queruntur. quosque dabunt Chelae Geminique et Aquarius ortus, unum pectus habent fideique immobile uinclum, [magnus erit geminis amor et concordia duplex,] magnus et in multos ueniet successus amicos. Scorpios et Cancer fraterna in nomina ducunt ex semet genitos; nec non et Piscibus orti


Why speak of this? When crime sits in the very heart of the people, and all things are filled with madness, right and wrong are confounded utterly. Iniquity rages, employing as its instruments the very laws themselves. Now has Guilt outgrown Punishment. Know then clearly that because men are born to warfare under many warring signs,-because of this it is that peace upon earth has been done away, the faith that binds is rare and vouchsafed but to a chosen few. Even as the heaven, so also the earth is at strife within itself, and the races of earth are subject to a discord in the very lot of their nativity.

Nevertheless, if you are fain to know which of the signs allied in a triangle are united together in spirit and friendly disposed to one another, then bring together the Ram and the other signs of his triangle. Yet is the Ram the simpler creature, and kindly entreats the offspring of the Lion and the Centaur beyond any return of love from them. For he is by nature a gentle sign, open to the harm that falls on gentleness, free of guile, and with heart as soft as the fleece that wraps his body. But the Lion and Centaur are fierce and rapine-loving, their mind is set on gain and impels them oftentimes to transgress true friendship for advantage, nor do they retain gratitude for a service done. And those born under either of these signs do not spare, but wage war intermittently, as occasion demands, against the offspring of the Ram : and this their fierce nature rather than any injury they have received compels them to do. Yet more strength must be accounted to reside in the double sign that hath a mixture of man, than in thee, Nemean Lion, in thy single form. Therefore is it that these signs are at peace with one another, and yet mingle therewith wrangling. Again, the sign of the Bull is allied to Capricorn: yet no better do the spirits of these unite in bonds of friendship. Those that are born under the Bull are fain to embrace the offspring of the Maid also : yet oft do they wrangle. But those who are born of the Claws and of the Twins, and of the Water-carrier-of one heart are they, and the bonds of good faith bind them indissolubly. Fortunate are their friendships, many their friends. The Scorpion and the Crab lead into brotherhood those born under them; and the offspring of the Fishes are friendly to them; yet often

## MANILI

concordant illis：〈sed〉 saepe et subdolus actus．
Scorpios aspergit noxas sub nomine amici．
at quibus in lucem Pisces uenientibus adsunt，
his non una manet semper sententia cordi；
commutant animos interdum et foedera rumpunt
ac repetunt，tectaeque lues sub fronte uagantur．
sic erit ex signis odium tibi paxque notanda；
in terris geniti tali sub lege creantur．
nec satis hoc tantum solis insistere signis；
contemplare locum caeli sedemque uagarum ； parte genus uariant，et uires linea mutat． 645
hinc modo dat mundus uires，modo deterit idem， ..... 649
quaeque illic sumunt iras，huc acta reponunt． ..... 650
nam sua quadratis ueniunt，sua iura trigonis， ..... 646
et quae per senos decurrit uirgula tractus， ..... $64 i$
quaeque secans medium transuerso limite caelum． ..... 648
［distat enim surgatne eadem subeatne cadatne］ ..... 651
crebrius aduersis odium est．cognata quadratiscorpora censentur signis et amica trigonis．nec ratio obscura est ；nam quartum quodque locauiteiusdem generis signum natura per orbem；655quattuor aequali caelum discrimine signant，in quibus articulos anni deus ipse creauit：uer Aries，Cererem Cancer，Bacchumque ministrans
Libra，Caper brumam genitusque ad frigora Piscis：
〈haec sunt cognatas quae signant sidera mentes．） ..... $659^{a}$
nec non et duplici quae sunt conexa figura ..... 660
quartum quemque locum retinent．duo cernere Pisces
et Geminos iuuenes duplicemque in Virgine formamet duo Centauri licet uno corpora textu：663
haec ueluti cognata manent sub foedere tali． ..... 670
sic et simplicibus signis stat forma quadrata： ..... 664
nam neque Taurus habet comitem，nec iungitur ulli ..... 665
horrendus Leo，nec metuit sine compare quemquam ..... 666
Scorpios，atque uno censetur Aquarius astro： ..... 667
635 sed saepe et scripsi：saepe et LMVen．：saepe est et $G$ ..... 636
tecteque $M$ 641 ex Regiomontanus ：et $L$ ：e $M$ ：ê $G \quad 642$ genin $M \quad 649-50$ huc transtuli 647 que in quae corr．L 648 secans scripsi：secant $L^{1} M$ ：secat $G L^{2} \quad 65 \mathrm{I}$ surgat ne eade subeat ne cadat（－que om．）M uersum seclusit Bentley 654 quodque $G$ ： quoque LMVen． 658 bacchumque $L$ ：bachumque $G$ ：baccumque $M$ $659^{a}$ uide Commentarios 660 conexa $L$ ：çnexa $M$ ：connexa $G$ 662 iuvenis $L M$ corpora $L$ ：corpore $G M$ uno in $G$ textu Bentley：textum $G^{2} L M$ Ven．：mixtum $G^{1} \quad 670$ huc transtuli haec Bentley：ac codd． 665 ne $M$ iungitur GVen．：ciugitur（sic）M：
there are motions of craft among them. The Scorpion, under cover of friendship, scatters bane. But those whose entrance into light the Fishes guard, abide not ever true to one purpose. Their hearts change ever and anon, they break ties and seek again to bind them, and down their front travels hidden corruption. Thus shall you mark peace and war as foretold in the signs: to laws such as these are those that are born upon the earth subject from birth.

It is not sufficient merely thus to attend to the signs in isolation. You must contemplate the general position of the heavens and the place of the planets. The signs alter their character (and their line changes its powers) according as they distribute their parts. Hence it is that the sky now gives to them, now withdraws from them their strength, and those signs which here take wrath into them lay it aside by being carried otherwhither. For squares have their own prerogatives, so too triangles, so again those signs which the line of the hexagon traverses, so once again those traversed by that line which cuts transversely the centre of the heaven. [For it makes a difference whether signs are just rising, or are climbing the heaven, or are setting.] Usually opposed signs are hostile. Bloodrelationships belong to square signs, friendships to triangles. Nor is the reason of this obscure. For all through the Zodiac the signs which nature has placed to be each the fourth sign from the other are of the same sex. Four signs mark out the heaven in equal division: they are those in which God has located the turning-points of the year. For the Ram brings the springtime, the Crab the corn, the Balance the vintage, and the Goat-Fish, begotten for cold, brings winter. 〈These are the signs which protect blood-kindred.) Those signs again which are compacted of two forms are each the fourth sign from the other. This you may see in the two Fishes, the Twins, the double Maid, and the Centaur's two bodies wrought in one woof. Because of this tie these signs are reckoned as wellnigh equal to the signs of blood-kindred. Yet another square is formed by the single signs. (For the Bull is without a consort, the grim Lion has no yoke-fellow, the Scorpion that fears no one is alone, and the Water-carrier is reckoned as a single sign), and because of their singleness these are

[^94]
## MANILI

idcirco affines signant gradibusque propinquis ..... 671
accedunt unaque tenent sub imagine natos. ..... 672
[quotquot cardinibus †proprie uariante mouentur.] ..... 683
quae quamquam in partes diuisi quattuor orbis ..... 684
sidera quadrata efficiunt, non lege quadrati ..... 685
censentur: minor est numeri, quam cardinis usus. ..... 686
sic quaecumque manent quadrato condita templo ..... 668
signa, parem referunt numeris aut tempore sortem. ..... 669
longior in spatium porrecta est linea maius, ..... 673
quae tribus emensis signis facit astra trigona. ..... 674
haec ad amicitias imitantis iura gradumque ..... 675
sanguinis atque animis haerentia pectora ducunt. ..... 676
utque ipsa ex longo coeunt summota recessu, ..... 677
sic nos coniungunt maioribus interuallis. ..... 678
haec meliora putant, mentes quae iungere possunt, ..... 679
quam quae non numquam foedus sub sanguine fallunt. ..... 680
proxima uicinis subscribunt, tertia quaeque ..... 681
hospitibus. sic astrorum seruabitur ordo. ..... 682
adde suas partes signis, sua partibus astra. ..... 687
nam nihil in totum seruit sibi: mixta feruntur,ipsis dant fines astris capiuntque uicissim.quae mihi mox certo digesta sub ordine surgent.690
omnibus ex istis ratio est repetenda per artem,pacata infestis signa ut dinoscere possis.perspice nunc tenuem uisu rem, pondere magnamet tantum Graio signari nomine passam,dodecatemoria in titulo signantia causas.nam cum tricenas per partes sidera constent,rursus bis senis numerus diducitur omnis.ipsa igitur ratio binas in partibus essedimidiasque docet partes. his finibus essedodecatemorium constat, bis senaque cuncta700omnibus in signis, quae mundi conditor ille

[^95]the signs of affinity: they assist the near degrees of relationship, and protect those born under a single sign . . . Yet these signs, although they divide the Circle into four parts and form squares, are not reckoned as under the law of squares. For the value of a numerical relation is less than that of a cardinal relation.

Thus all the signs which have their established place in the precincts of a heavenly square have a like lot either from their numerical relation to one another or from their relation to the seasons.

The line which, covering three signs, makes their stars into a triangle is longer, and embraces a wider area than the line of the square. It conducts us to friendships which are wellnigh as strong in degree as ties of blood, and to affections that knit heart to heart. Just as the signs unite with one another across a vast intervening space, so they unite $u s$ across distances greater than those that separate kin. These signs men believe to be kinder and of more avail to unite men's spirits than those which, though they govern ties of blood, are yet so often false to the union they control. Signs which are next to one another aid neighbours, signs alternately placed guests. So will you find the order of the stars faithfully reflected in their workings.

But you must also assign to the constellations those parts of other signs which belong to them, and to these parts again their proper planets. For nothing lives to itself alone. The signs combine as they move in heaven. To the actual planets they assign their provinces, and in their turn they receive what belongs to themselves. These things will I set before you in detail anon; they shall appear to you in their fixed order. From all of them must we by our science draw true reasonings: that so you may be able to distinguish signs which are friendly from those which are hostile. Be content now to observe a phenomenon trivial in appearance but of mighty import. It allows of being noted only under a Greek name. I speak of the dodecatemories: the name itself explains the principle. Every sign consists of thirty degrees: divide this number by twelve: a simple calculation shows you that you then have twelve divisions each of two and a half degrees. This is the measure of the province of a dodecatemory. There are twelve dodecatemories, then, in each sign. And the mighty builder of the sky has assigned one of these to each

[^96]
## MANILI

attribuit totidem numero fulgentibus astris, ut sociata forent alterna sidera sorte,
et similis sibi mundus et omnia in omnibus astra, quorum mixturis regeret concordia corpus,
et tutela foret communi mutua causa.
idcirco, quamquam signis nascantur eisdem, diuersos referunt mores inimicaque uota; et saepe in pecudes errant humana, maremque femina subsequitur; miscentur sidere partus, singula diuisis uariant quod partibus astra dodecatemoriis proprias mutantia uires. nunc quot sint cuiusque canam, quoue ordine constent, ne uagus ignotis signorum partibus erres.
ipsa suo retinent primas in corpore partes
sidera; uicinae subeuntibus attribuuntur; cetera pro numero ducunt ex ordine partes, ultima et extremis ratio conceditur astris. singula sic retinent binas in sidere quoque dimidiasque sui partes et summa repletur
sortibus exactis triginta sidere in omni.
nec genus est unum, ratio nec prodita simplex, pluribus inque modis rerum natura locauit diduxitque uias uoluitque per omnia quaeri. haec quoque comperta est ratio sub nomine eodem: 725 quacumque in parti nascentum tempore luna constiterit, numeris hanc ter dispone quaternis, sublimi totidem quia fulgent sidera mundo. inde suas illi signo, quo luna refulsit, $\dagger$ qua et hunc defuerant $\dagger$ partes numerare memento. 730 proxima tricenas pariterque sequentia ducunt. [hic ubi deficiet numerus, tunc summà relicta in binas sortes adiecta parte locetur dimidia, reliquis tribuantur ut ordine signis ; ]

[^97]of the twelve signs that shine in heaven; to the end that the constellations might be bound together by thus giving and receiving, and that the different parts of the sky might have likeness one to another and every star contain somewhat of all others; so should there be out of this commingling a governing harmony in the body of the universe, and so should each part of it from a common interest aid the other. Thus it is that though men are born under the same signs, they reflect different characteristics and have opposed desires. Thus it is that often human constellations stray into bestial offspring, and in one sign there is born first a male and then a female being. The offspring of the signs are mixed even as the signs themselves: and the reason is that individual signs vary according as the degrees of the signs generally are distributed, and by receiving the dodecatemories they transform their influences. Now will I tell you how many degrees, and in what order constant, belong to each sign. Thus you will know the degrees in all the signs and not go astray. Each sign retains for itself its first dodecatemory: the next dodecatemory is given to the sign immediately following. The other signs receive their due proportion of degrees in order. The last degrees of a given sign pass to the sign most distant. Thus each sign keeps two and a half degrees of itself in its own constellation, and its full complement of degrees is made up by the exhaustion of the thirty degrees in each of the other signs.

There is more than one kind of procedure, and the rule given to us admits variation. Nature has committed her paths to more methods than one, and draws them in various directions; and her desire is that men should seek her out by all routes. Another rule that has been devised for the dodecatemories is this :-Multiply by twelve the number of the degree in which the moon stands at any birth; for the signs that shine in high heaven are twelve. Subtract from the result, and give to the sign in which the moon shone, the proper number of that sign's degrees. . . . Subtract and give thirty degrees to the sign following and the same number to the rest in order. [When this number falls short of thirty, take what remains of it and divide it by two and a half, distributing the result among the signs that remain.]

[^98] GL Veri.

## MANILI

$\begin{array}{ll}\text { in quo destituent, eius tum luna tenebit } & 735 \\ \text { dodecatemorium signi. post cetera ducet } & \\ \text { ordine quoque suo, sicut stant astra locata. } & \\ \text { haec quoque te ratio ne fallat, perspice paucis, } & 73^{8}\end{array}$

$$
\text { dodecatemorii quid sit quod dicitur esse } 740
$$

dodecatemorion. namque id per quinque notatur partes; nam totidem praefulgent sidera caelo, quae uaga dicuntur, ducunt et singula sortes dimidias, uiresque in eis et iura capessunt. in quocumque igitur stellae quandoque locatae $\quad 745$ dodecatemorio fuerint, spectare decebit; cuius enim stella in fines in sidere quoque inciderit, dabit effectus in uiribus eius. undique miscenda est ratio per quam omnia constant. uerum haec posterius proprio cuncta ordine reddam, 750 nunc satis est docuisse suos ignota per usus, ut, cum perceptis steterit fiducia membris, sic totum corpus facili ratione notetur, et bene de summa ueniat post singula carmen. ut rudibus pueris monstratur littera primum
per faciem nomenque suum, tum ponitur usus; tunc coniuncta suis formatur syllaba nodis; hinc uerbis structura uenit per membra ligandis; tunc rerum uires atque artis traditur usus, perque pedes proprios nascentia carmina surgunt; $\quad 760$ singulaque in summa prodest didicisse priora; quae nisi constiterint primis fundata elementis, effluat in uanum rerum praeposterus ordo,764
uersaque, quae propere dederint praecepta magistri: ..... 763
sic mihi per totum uolitanti carmine mundum ..... 765erutaque abstrusa penitus caligine fata

[^99]The moon will be in the dodecatemory of that sign in which you get a remainder less than thirty. Pursuing this method you will find that the moon will control each of the other dodecatemories according to the fixed order in which the signs are arranged.

That the theory of the dodecatemories may lead you into no error, learn now in brief what it is that is called the dodecatemory of a dodecatemory. The dodecatemory is divided into five parts. For five planets shine pre-eminent in the heavens : and each planet controls a half-degree, and in it exercises sway and influence. We must note, therefore, in what dodecatemory the planets are at any moment stationed. For, in any given sign, a planet will work powerful results on the influence of the particular dodecatemory into whose province it has come. We must take into account this all-pervading interaction: for upon it everything depends. But all these things in their entirety I will expound anon in due order. For the present it suffices to put before you clearly each new fact according as it is needed. Thus when you have mastered the individual parts of my theme and stand firm in your faith, you will be able by an unlaborious process of reasoning to trace out for yourself the whole body of it ; and my poem after having treated of particulars will fitly pass to speak of the whole which they form. In giving children their first lessons, you teach them to begin with the appearance and forms of letters before putting before them the use of them: then you form a syllable of letters duly linked together: then comes the building of words to be duly bound together through their parts. Then you teach the child meanings and instruct him in the art of words, and finally, with - measured pace, a poem rises and comes to live. And in the business of the perfect work it profits to have mastered each step that went before; whereas, unless these steps are firmly founded in a mastery of elements, Ambition's bold design will dissolve, and the wisdom too hurriedly taught will suffer overthrow. Even so I, passing swiftly in song up and down the universe and drawing out the Fates from their deep and dark retirement, setting them to
com(cō)ponitur codd. membra Scaliger: uerba codd. ${ }^{757}$ ligandis scripsi : legendi codd. quod $M \quad 762$ constiterunt $M^{1} \quad 763-4$ inter se transposuit Breiter 763 propere ex corr. $L \quad \quad 764$ eflluat $L^{2}$ : et fluat $G L^{1}$ : ut fluat $M$ 766 calligine $L^{1} M$

## MANILI

Pieridum numeris etiam modulata canenti, quoque deus regnat reuocanti numen in arte, per partes ducenda fides, et singula rerum sunt gradibus tradenda suis, ut cum omnia certa notitia steterint, proprios reuocentur ad usus. ac uelut in nudis cum surgunt montibus urbes, conditor et uacuos muris circumdare colles destinat, ante manus quam temptet scindere fossas, quaerit opes: ruit ecce nemus, saltusque uetusti
procumbunt solemque nouum, noua sidera cernunt ; pellitur omne loco uolucrum genus atque ferarum, antiquasque domos et nota cubilia linquunt. ast alii silicem in muros et marmora templis rimantur, ferrique rigor per tempora nota
quaeritur ; hinc artes, hinc omnis conuenit usus:
tunc demum consurgit opus, cum cuncta supersunt, ne medios rumpat cursus praepostera cura. sic mihi cunctanti tantae succedere moli materies primum rerum, ratione remota,
tradenda est, ratio sit ne post irrita, neue argumenta nouis stupeant nascentia rebus.
ergo age, noscendis animum compone sagacem
cardinibus, qui per mundum sunt quattuor omnes dispositi semper mutantque uolantia signa.
unus ab exortu caeli nascentis in orbem, qua primum terras aequali limite cernit. alter ab aduersa respondens aetheris ora, unde fugit mundus praecepsque in Tartara tendit. tertius excelsi signat fastigia caeli,
qua defessus equis Phoebus subsistit anhelis declinatque diem mediasque examinat umbras. ima tenet quartus fundato nobilis orbe, in quo principium est reditus finisque cadendi sideribus, pariterque occasus cernit et ortus. 800 haec loca praecipuas uires summosque per artem fatorum effectus referunt, quod totus in illis

767 canenti dett, : canendi codd. 770 ut Scaliger: et codd. 771 nuncia stiterint $M$ reuocentur Regiomontanus: reuocantur codd. $77^{2}$ inundis $M$ cum surgunt Scaliger: consurgunt codd. urbes Regiomontanus: orbes codd. 773 conditor dett.: conditur codd. 774 scen. dere $M \quad 775$ quaerit opes scripsi: uertit opus codd. 778 notaque cubilia cubilia $M$ linquit $G^{1}$ : linqunt $G^{2} \quad 779$ ali $M$ templis in nulla editione ante Scaligeri primam inueni : templi codd. $\quad 781$ huic artes $G:$ hinc artes (hinc in ras.) $L$ omnis om. $M$ 784 hic Ven. $7^{88}$ ante hunc $u$. lemma in $G M$ et marg. $L$ de cardinibus mundi ${ }^{789}$. omnes $G: \overline{\text { oms }} L M \quad 792$ qua $L M:$ qui $G$ cernit (-it in ras.) $G$ :
tuneful Pierian measures, and bringing down to earth by my science the power by which God rules-I too must lead the learner on in faith, line upon line. First must I teach him the parts step by step: and then when all things stand sure in his knowledge the parts answer to their proper need. When a new city rises on a bare mountain side, and he that builds it is planning to draw walls about the empty hills, the builder, ere his men essay to cut their trenches, looks round for the means of building. The forest tumbles and the ancient woodlands fall, and look on skies unseen before and unseen stars. All the tribe of birds and beasts is driven from its place, and leaves its old home and loved bed. Others hunt for flints for their walls, marble for their temples; hardness of iron is sought by sure tempering. Art and craft of every kind make league together. At length the fabric rises: but only when there is abundance of everything : else would the zeal of over-haste shatter the work when its course is but half run. Even so I, timidly essaying a mighty labour, must first deliver to you the material of our building, letting wait reason's larger plan, lest her plan hereafter fail, and our conclusions as they rise stand shamed before some unanticipated fact.

And so apply your mind with all circumspection to the understanding of the cardinal points. There are four of them in all disposed for ever in the sky: and they speed the flying signs in their swift succession. The first of them is in the Rising Heaven, where the sky comes on to the horizon and first beholds the earth equally divided. The second has the corresponding place on the opposite edge of ether : it is the point at which the sky drops away and tumbles into Tartarus. The third marks the culminating point of the height of heaven; there Phoebus halts in weariness with his panting coursers, thence he begins the downward march of Day, there he poises the shadows evenly upon the dial. The fourth governs the lowest region of the sky, and has its honour in that it forms the foundation of the sphere. Here the stars make an end of falling and begin to return. It beholds at equal distances their risings and their settings. These four points have their especial influence, and by our science are mighty in the effects of fate. For the whole

[^100]
## MANILI

nititur aetheriis ueluti compagibus orbis. quem nisi perpetuis alterna sorte uolantem cursibus excipiant nectantque in uincula bina
per latera atque imum templi summumque cacumen, dissociata fluat resoluto machina mundo.
sed diuersa tamen uis est in cardine quoque, et pro sorte loci uariant utque ordine distant. primus erit, summi qui regnat culmine caeli
et medium tenui partitur limite mundum, quem capit excelsa sublimem gloria sede. scilicet haec tutela decet fastigia summa, quicquid ut emineat sibi uindicet et decus omne asserat et uarios tribuendo regnet honores;
hinc fauor et species atque omnis gratia uulgi: reddere iura foro, componere legibus orbem foederibusque suis externas iungere gentes et pro sorte sua cuiusque extollere nomen. proximus, extrema quamquam statione locatus, 820 sustinet aeternis nixum radicibus orbem, effectu minor in specie, sed maior in usu;822
maior in effectu minor est, quod partibus ipsis ..... 739
fundamenta tenet rerum censusque gubernat: ..... 823
quam rata sint fossis scrutatur uota metallis atque ex occulto quantum contingere possis. ..... 825
tertius aequali pollens in parte, nitentem qui tenet exortum, qua primum sidera surgunt, unde dies redit et tempus discribit in horas,hinc inter Graias horoscopus editur urbes nec capit externum, proprio quia nomine gaudet,- $\quad 830$ hunc penes arbitrium uitae <est〉, hic regula morum est fortunamque dabit rebus ducetque per artes, qualiaque excipiant nascentis tempora prima, quos capiant cultus, quali sint sede creati, utcumque admixtis subscribent uiribus astra.

|  |  |
| :---: | :---: |
|  |  |
| m $L$ exelsa $M$ | 813 tutela in ras. $L$ 814 quicquod $L^{1}$ |
| cus Dulcinius: $\overline{\text { ds codd. }}$ | omne dett. : omni codd. 815 asserat $G$ |
| dserat $L^{1} M$ regnet dett. : | reget codd. 816 omni ( $\overline{\mathrm{mm}}$ ) codd. 817 |
| dderere $M \quad 820$ ext | ema scripsi : est ima codd. 821 aeternis |
| Bentley: alternis GL : alterius | s $M$ nixum dett. : mixtum $G L^{2} M$ : muxtum |
| $L^{1} \quad 822$ affectu Ven. | specie Scaliger: species codd. 739 huc |
| 824 rata $L^{2}$ | rara GL ${ }^{1}$ scrutatur Regiom |
|  | dd. |
|  |  |
| dit codd. discribit Bec | chert (describit iam Regiomontanus) : desc |

sphere of heaven rests wholly on them as upon ethereal hinges. Were it not that in succession they carry this flying sphere in its never-failing circuit, binding it with bands through its two sides and through the lowest and the highest of its regions, the heavens would dissolve and their fabric part in twain and disappear.

But the influence which resides in each of these cardinal points is different. They vary according as they are placed, and according to the order in which they are separated from one another. First of them is that which holds sway in the topmost height of heaven and divides the mid sky by an airy line. This post high-enthroned is the dwelling-place of Glory. And truly to this supreme station fitly belongs the protection of whatsoever can claim for itself pre-eminence, and arrogate all honour, and reign by lavish distribution of high offices. Hence comes applause and the appeal to the eye and every form of popular favour : the greatness that gives to citizens civil rights, that brings all the world under the rule of peaceful laws, that joins in just alliance races unallied, and that exalts the fame of each man in his proper station. Second, albeit in a station farthest removed, is that point which bears the sphere poised on its everlasting foundations. Its influence is less in outward show, but greater in practical utility: yea, greater in influence is that which is thus less in show, because, by the very region it occupies, it controls the foundations of things and governs wealth. It examines, when mines are dug, how far hopes have been ratified, and how much you may win out of the hidden values of the earth. The third post is mighty in that it divides the world into equal parts. It controls the Rising Heaven, where first the stars ascend, where day begins to return and apportion time among the hours. Hence is it that in Greek cities it is called 'Horoscope', nor will it admit an alien name, since it has pleasure in its own. With this post is the arbitrament of life, the regulation of character: it gives happy issue to our undertakings and leads us to all skill ; it determines the first years that await a man from birth, what education he receives, unto what station of life he is born, according as the planets co-operate and intermingle their influences. The last post,

[^101]
## MANILI

ultimus emenso qui condit sidera mundo occasumque tenens submersum despicit orbem, pertinet ad rerum summas finemque laborum, coniugia atque epulas extremaque tempora uitae otiaque et coetus hominum cultusque deorum.
nec contentus eris percepto cardine quoquam; interualla etiam memori sunt mente notanda per maius dimensa suas reddentia uires. quicquid ab exortu summum curuatur in orbem, aetatis primae nascentisque asserit annos.
quod summo premitur deuexum culmine mundi, donec ad occasum ueniat, puerilibus annis succedit teneramque regit sub sede iuuentam. quae pars occasu contermina 〈quae〉que sub orbem descendit, regit haec maturae tempora uitae
et propria serie uarioque exercita cursu.
at qua perficitur cursus redeuntis ab imo, tarda supinatum lassatis uiribus arcum ascendens seros demum complectitur annos labentemque diem uitae tremulamque senectam.
omne quidem signum sub qualicumque figura partibus inficitur mundi; locus imperat astris et dotes noxamque facit ; uertuntur in orbem singula et accipiunt uires caeloque remittunt. mundi etenim natura genus legesque ministrat
finibus in propriis et praetereuntia cogit esse sui moris, uario nunc diues honore, nunc sterilis, poenam referentia sidera sedis. quae super exortum est a summo tertia caelo, infelix regio rebusque inimica futuris et uitio fecunda nimis; nec sola, sed illi par erit, aduerso quae fulget sidere sedes iuncta sub occasu; uel praestite cardine mundi utraque praetenta fertur deiecta ruina; porta laboris erit; scandendum est atque cadendum. 870

[^102]that which at their journey's end hides the stars, and, governing the Setting Heaven, beholds the sky submerged; this post has its business in consummations and the end of labours, marriages, banquets, and the last days of life, and ease and the minglings of men and the service of the gods.

It is not enough to observe merely the cardinal point, be it which it may. We must note also and bear in mind the regions between the cardinal points: in the wider area which they cover these mid-regions have their proper influences. All that winding region which extends from the Rising Heaven to the highest point of the sky controls the first years of life and growth. The region which is beneath the summit of the world and slopes ever downward till it comes to the Setting Heaven has the tutelage of childhood, and its judgement-seat governs early youth. That part which, touching the Setting Heaven, descends below the world, governs the seasons of full-grown life with all that they have to bear both from the natural passage of years and from the broken course of fortune. But where the line of the sky returning from the depth, climbs slowly over the sinking and outworn circle and finishes its course, this last region embraces our latest years and the declining day of life and palsied eld.

Every sign, whatsoever its configuration, takes the infection of the region of heaven wherein it dwells. Position governs the stars and gives to them their power of boon or bane. Each of them revolves, and, revolving, receives powers from the heavens and renders them. For the nature of the sky gives to them within its confines their qualities and their law, and compels the signs as they pass to be of its own character; and now it is rich with diversity of glory, now barren, and the signs bear the penalty of the region wherein they sojourn.

That region which is above the Rising Heaven, the third in order from the summit of the sky, is a region unblessed, full of bale for the future, all too fertile of harm. Nor that region alone: like unto it is the house which shines with opposed star, next neighbour to, and beneath, the Setting Heaven. Albeit a cardinal house watches over each, yet is each called the place of Despond, and ruin hangs over it. These are the Gates of Toil: here do you climb, here fall.

[^103]
## MANILI

nec melior super occasus contraque sub ortu sors agitur mundi. praeceps haec, illa supina pendens aut metuit uicino cardine finem, aut fraudata cadet. merito Typhonis habentur horrendae sedes, quem tellus saeua profudit,
cum bellum caelo peperit, nec matre minores exstiterunt partus. sed fulmine rursus in altum compulsi, montesque super rediere cadentes, cessit et in tumulum belli uitaeque Typhoeus. ipsa tremit mater flagrantis monte sub Aetna. at quae fulgentis sequitur fastigia caeli proxima, uix ipsi cedat, quoi iungitur, astro; spe melior palmamque petens uictrixque priorum altius insurgit, summae comes addita finis;
in peiusque manent cursus, nec uota supersunt.
quocirca minime mirum, si proxima summo atque eadem inferior ueneranda sorte locatur, quod titulus felix. censum sic proxima Graiae nostra subit linguae uertitque a nomine nomen. Iuppiter hac habitat. fortunae crede regenti.
huic in peruersum similis deiecta sub orbe imaque submersi cingens fulcimina mundi, aduersa quae parte nitet, defessa sub acta militia rursusque nouo deuota labori cardinis et subitura iugum sortemque potentem; nondum sentit onus mundi, iam sperat honorem. daemonien memorant Grai, Romana per ora quaeritur inuersus titulus. sub corde sagaci conde locum numenque dei nomenque potentis, quae tibi posterius magnos reuocantur ad usus. hic momenta manent nostrae plerumque salutis

872 supina $M$ : superna $G L \quad 874$ fraudat (ras. post-at) acadat $M$ ciphonis $M \quad 877$ exstiterunt Scaliger: exstiterant Ven. : exstiterint codd. rursū $M \quad 878$ conpulsi $M \quad 879$ et om. $G$ typhoeus $L$ : typhaeus $G$ : tiphoeus $M$ 880 flagrantis $G L^{2} V e n .:$ fraglantis $L^{1} M$ montes subetna $M$ : fulmine montis Ven. Aetna om. $G$ 88r at quae fulgentis . . . caeli Bentley: atque refulgentis (-s punxit L) . . . caelo codd. fatigia $M \quad 882$ uix Bentley : nec GL Ven.: non $M$ caedat $G$ : cedit Ven. cui (quoi dedi) iungitur Huctius : qui fungitur (funigitur $L^{\prime}$ ) codd. 883 priorum $M$ : piorum GL 887 inferior Bonincontrius : interior codd. locatur scripsi : dicatur codd. 888 sic Bentley: si codd. graia M 889 uertitque Scaliger: uirtutique (uirtutia Ven.) codd. 890 hac Regiomontanus: hoc codd. credere genti codd. : corr. Scaliger 891 orbem Ven. 892 cingens fulcimina scripsi : contingent fulmina codd.

## ASTRONOMICON II

Not more fortunate is that portion of the sky which lies above the Setting, or that again which is beneath the Rising, Heaven. The one is tumbling headlong, the other hangs trembling : fearing either to meet its end in the cardinal house beneath, or, robbed of its support, to fall utterly. These dread regions are rightly named the realm of Typho, that giant whom the grim Earth bare, and brought forth withal war in heaven. Not less in stature than their mighty mother were those giant sons of Earth. But the bolt of Jupiter drove them back again into the deep: the hills closed over them as they fell: and Typhoeus passed to where the mountain-side buries all his living and battling. Their very mother shakes with fear at the fire of them that burst forth beneath Aetna. The region which is below and next to the summit of the shining sky, would scarce yield even to that star whereto it is neighbour. Of braver hope than its rivals and moving to the palm, victorious over them that went before, it rises higher than them all, and stands comrade to the topmost limit. Yet is there left for it a course only to a place lower than the highest, nor do its hopes live. And so marvel not that, being nearest to the summit and yet below the Realm of Blessedness, it bears the name Fortunate. So best may our speech approach to the golden speech of Greece and render name for name. Jupiter here dwells. Put thou thy trust in the fortune that presides here. Like unto this region, but with inverse likeness, is that which shines from the opposed quarter of heaven, sunk beneath the sky and touching the foundation-pillars of the submerged universe. Wearied with a warfare scarce ended, yet is this region again enlisted for new toils, and ready to take upon itself the scales of its cardinal house and all that mighty influence. Not yet does it feel the weight of the world, but already yearns for the glory of bearing it. This region the Greeks call Daemonie: our Roman speech lacks words wherewith to render that title. But do you bear in mind with care the region and the name and note of the mighty diety indwelling there. These things hereafter may be recalled to serve great uses. In this region more than elsewhere are set the issues of our bodily health : here is arrayed that

[^104]
## MANILI

bellaque morborum caecis pugnantia telis, uiribus ambiguum geminis casusne deine, nunc huc nunc illuc sortem mutantis utramque. sed medium post astra diem curuataque primum culmina nutantis summo de uertice mundi $\dagger$ aethera $\dagger$ Phoebus habeet, sub quo quia corpora nostra detergent uitia et fortunam ex uiribus eius concipiunt deus ille locus sub nomine Graio dicitur. huic aduersa nitens, quae prima resurgit sedibus ex imis iterumque reducit Olympum, pars mundi furuumque nitet mortisque gubernat et dominam agnoscit Phoeben fraterna uidentem regna per aduersas caeli fulgentia partes [fataque damnosis imitantem finibus orbis]. huic parti dea nomen erit Romana per ora, Graecia uoce sua titulum designat eundem. arce sed in caeli, qua summa accliuia finem inueniunt, qua principium decliuia sumunt, culminaque insurgunt occasus inter et ortus
suspenduntque suo libratum examine mundum, asserit hanc Cytherea sibi per sidera sedem et ueluti faciem mundi sua collocat ora: quaque humana regit, propria est huic reddita parti uis: et coniugia et thalamos taedasque gubernat.
haec tutela docet uenerem sua tela mouere. nomen erit Fortuna loco. quo percipe mentem, ut breuia in longo compendia carmine praestem. at qua subsidit conuerso cardine mundus fundamenta tenens aduersum et suspicit orbem
ac media sub nocte iacet, Saturnus in illa parte suas agitat uires, deiectus et ipse imperio quondam mundi solioque deorum, et pater in patrios exercet numina casus
fortunamque senum ; priua est tutela duorum,

[^105]warfare whereof the weapons are the viewless missiles of disease : and whether it be God or Chance that employs here his double power, directing this way and that at will either influence, who may say? That starry region that comes after the Midday, where the height of heaven first begins to slope downward and the sky falls away from its summitthis region Phoebus loves. By his grace is it that our bodies here lay aside their ills, and conceive happiness out of his strength. Therefore is this region called in the Greek tongue 'the God'. Opposite to this shines that region of the universe which is the first to rise from the lowest depth and which brings back the sky to us. Sombre is its light, it governs our dying, and it knows for its mistress Phoebe, Phoebe that beholds the light of her brother's realm flashed upon her from the opposed part of heaven, [Phoebe, that with the waning edges of her orb is an image of our dying life]. This region is called in Latin speech 'the Goddess.' The Greeks have given it the same title in their own tongue. But in the citadel of the sky, where the upward heights end and the downward slopes begin, where the summit rises equidistant from the Setting and the Rising Heaven, and holds poised in its balance the whole universe-here Cytherea claims for herself a throne among the stars, and she sets her face to be as it were the countenance of heaven. And to this region belongs that power whereby she sways human affairs. It governs marriages and bridal chambers and nuptial torches. This region is it that teaches love to order its legions in the fight. Fortune is its name. From the name know the character of the region. Even so shall my poem, albeit long, find swift ways through difficult themes.

Where the world sinks at the foundations of heaven and lost in midnight beholds above it the opposed sky,-that is the region wherein Saturn exercises his strength. Of old was he himself cast down from the Empire of heaven and the seat of the gods. As father he bears influence over the haps that befall fathers and over the fortunes of them that are old. He hath a separate guardianship of each class

[^106]
## MANILI

[ $\dagger$ nascentum atque patrum, quae tali condita pars est.] asper erit templis titulus, quem Graecia fecit, daemonium, signatque suas pro nomine uires. nunc age, surgentem primo de cardine mundum respice, qua solitos nascentia signa recursus
incipiunt, uiridis gelidis et Phoebus ab undis enatat et fuluo paulatim accenditur igne, haec tua templa ferunt, Maia Cyllenie nate: et facies, si gnata notas, quod nomen et ipsi auctores tibi dant artis quae uicit Olympum:
in qua fortunam natorum condidit omnem natura et caelo suspendit uota parentum. unus in occasu locus est super, ille ruentem praecipitat mundum tenebris et sidera mersat tergaque prospectat Phoebi, qui uiderat ora.
ne mirere, nigri si Ditis ianua fertur
et finem retinet uitae . . . ,
hic etiam ipse dies moritur terrasque per orbem subripit et noctis captum sub carcere claudit. nec non et fidei tutelam uindicat ipsam955
pectoris et pondus. tanta est in sede potestas, quae uocat et condit Phoebum recipitque refertque consummatque diem. tali sub lege notandae templorum tibi sunt uires, quae peruolat omnis astrorum series ducitque et commodat illis ipsa suas leges, stellaeque ex ordine certo, ut natura sinit, lustrant uariasque locorum efficiunt uires, utcumque aliena capessunt regna et in externis subsidunt hospita castris. haec mihi sub certa stellarum parte canentur ;
nunc satis est, caeli partes titulosque notasse effectusque loci per se cuiusque deosque. [quoi parti nomen posuit, qui condidit artem, octotopos, per quod stellae diuersa uolantes quos reddant motus, proprio uenit ordine rerum.] 970
936 uersum seclusi nascentum $G L^{2}$ : nascendum $L^{1}$ : nascendumque (sed -que eras.) $M, c f .962$ adque $M$, corr. $M^{1} \quad 937$ asper Bentley: asperum codd. erit $M$ : erat $G L$ templis scripsi: tempus $G L$ : templum $M$ quae $G$ fecit Bonincontrius: feci codd. 939 de om. sup. lin. add. L 940 solitos . .. recursus Bentley : solido .... recursu GL : soli dona scencia signare cursu $M^{1}$, corr. man. rec. 943 nate om. $M$ : fate $L^{1} \quad 944$ et facies si gnata notas scripsi: o facies signata nota (signat anota $M$ ) codd. 945 art is quae Scaliger: artes qua codd. uicit scripsi : ducit codd. 947 et caelo scripsi: ex illo codd. 948 lacus Ven. 949 tenebris Bentley: terris codd. mersat dett. : mersit codd. 950 tergaque Scaliger: terraque codd. 952 lacuna in codd. : mortique locatur suppleuit rec. man. $G$ 953 hic Bentley : hinc codd. 954 supripit $G \quad 958$ consumatque $G$ Ven. talis $G$ lege $L^{\prime} M$ : nocte $G L^{2} \quad 959$ quae Bentley: quas codd. puolat in ras. L 962 lustrantque (sed -que eras.) $M, c f .936$
[both of them that are †born and of fathers: and in such a region is it located]. A dread title belongs to his realm : Daemonium the Greek hath it: and the name betokens clearly the power that dwells here. Rouse you now, and look upon the sky as it emerges at the first cardinal point, there where the reborn signs begin again their wonted courses, where Phoebus rises pale from the cold sea, and only slowly begins to burn again with his golden fire. Cyllenian, born of Maia, here they say is thy temple. And if thou mark births, thou wilt perform the office assigned to thee by the name of this region, and by the founders themselves of that art which conquered Olympus. To that art Nature has committed the fortunes of children, making dependent upon the heaven the prayers of parents. One region only remains, the Setting Heaven. This region speeds the falling sky into the shadows and overwhelms the stars. It looks forth upon the retreating sun. Yet aforetime it beheld his face. Marvel not that it should be called the Gate of Pluto, and that it holds the issue of life. . . . for here day itself dies, and all over heaven hides the earth, and shuts the heaven prisoner in the dungeon of night. This region claims also the solemn guardianship of Good Faith and of hearts weighed and not wanting. Such is the power that dwells in the region which calls to itself and lays to rest the Sun, which takes to itself the day and gives it back to us and again brings it to its close. Mark and learn, then, the laws governing the influences of these regions. The stars, as they speed through each region in order, lend to it their own laws and borrow from it laws for themselves. Moreover the planets in fixed order, according as Nature allows, circle in solemn course and vary the influences of the different regions, making assay of realms not their own, and fixing their sojourn in a foreign camp. All this will I expound in song when the planets assert their allotted part. Now it suffices to have marked out the different regions of heaven, and their names, and the power of each place, and the deity that dwells there. [To this division of our subject he that founded our art gave the name 'Octotopos': what are the motions of the planets that fleet through this region in a direction opposite to its own-this I will relate in due order.]

[^107]

Planetary and Zodiacal Symbols

## COMMENTARY

1-1 49. Prooemium. Similarly elaborated prooemia are prefixed to each of the five books of the Astronomica, with the exception of the last. ' Nihil illis divinius, nihil copiosius gravius et iucundius dici potest,' says Scaliger of them, justly (p. 21). There is not much justice or sympathy in Conington's criticism of them (Virgil, vol. i, ed. 4, Appendix).

The prooemium to Book II falls into two fairly defined divisions. In 1-49 Manilius reviews the 'progress of poetry' from its beginnings down to his own time. The fountain-head is Homer. From him 'a thousand rills their progress take' (1-11).

Proximus Hesiodus: Hesiod's poetry is a poetry of nature and origins, with mythology mingling some astronomy (11-24). The fabulistic astronomical poets - Aratus? - are worth little (25-38). Theocritus teaches the elevated treatment of a humble theme (39-42). In sciences other than astronomy there is a considerable body of poetry-Nicander (?) and his Latin imitators (43-5). Even the science of necromancy has its poets.

In 50-149 Manilius passes to the exposition of his own theme, its originality ( $53-9$ ) and its grandeur ( $60-6$ ). Rightly viewed, it is nothing else than a study of the divine reason. (There follows a statement of the principal theses of the Stoic metaphysic: the $\xi v \mu \pi a ́ \theta \in I a$ of the different parts of the universe (67-128) ; the 入óyos ópOós (129-35);
 poem is addressed only to the few. The stars will hear it and marvel ; and so will a small band of men upon earth. Riches and empire and pleasure are things transitory. This poem is occupied with abiding interests.

1. Maximus: princeps literarum Homerus, Pliny N. H. ii. 64 ; parens uatum, princeps Heliconis, Homerus, Claudian xxiii. (Koch) 13. But Homer was also áoтро入óyos: cf. Schol. 1l. xviii. 251 'H ${ }^{\text {'áк } \lambda \in t-~}$
 Heraclit. $119 \mathrm{n} .=$ Diels 105. Achilles Isagoga, Maass Commentt. in




2. regem : Priam. Virg. Aen. ii. 503 quinquaginta illi thalami,
 To the same effect the headline in the quarto edition sine loco et anno: De regibus qui fuerunt sub Hectore. But Stoeber takes regem as $=$ Agamemnona, interpreting patrem as $=\pi о \not \mu \hat{\ell} \nu a \lambda a \omega \hat{\nu}$.
3. castra decem aestatum : as Propertius iii. 12. 24-5 (also of Ulysses) castra decem annorum. decem aestatum : echoed in 4 by totidem ... annis, as uictamque by uicerat (which disposes of the variant tutamque). Hectoreamque is due to an accidental trajection of Hectore Troiam. aestatum $=$ et fatu $=$ et fucit (of which et caeli is probably a bold emendation). Breiter reads castra ducum et caeli $=$ castra ducum humanorum et deorum. Ellis supports this interpretation from Isocr. Panath. 88 (Agamemnon's army) arpató-


үє 子ovótas (Hermathena, 1893, p. 286). He also suggests Rhesi for caeli coll. Ovid A. A. ii. 139-40 subitus cum Pergama fluctus abstulit et Rhesi cum duce castra suo. For the older corrections Hectoream(as)que facem(es) there is not much to be said: ignem ab Hectore in naues Graecorum iniectam, du Fay; cf. Prop. ii. 8. 32 feruere et Hectorea Dorica castra face; Ovid Pont. iv. 7. 42 Hectoreas sustinuisse faces; Met. xiii. 7 Hectoreis . . . cedere flammis; Man.v. 301-2 Hectoris ille faces; Culex 320 sqq. Barth foolishly interprets facem as = iram; and it might even be taken as = funus, as Sen. Ag. 647 post Hectoreos...ignes, or again as $=$ comubium, as Sen. Oed. 272 Polybi faces; cf. Prop. iv. I1. 46 inter utramque facem ; Ovid Fast. ii. 561-2: all of which seems to indicate that Manilius wrote something different.
uictamque : so Aetna 585 extinctosque suo Phrygas Hectore. Cf. Auson. Epitaph. Her. xiv. xxiii. Anth. Lat. B. 631. 3-4.
sub Hectore, 'in the person of Hector,' a favourite use of this preposition in Manilius; e.g.iv. 24-5 Troia sub uno non euersa uiro; and below, 16, sub fratre, 622 te Nemeaee sub uno. Ovid Met. vi. 468 sub illa.
$4-5$. I have retained the MS. reading from timidity rather than from conviction. 'The wandering of the chieftain Ulysses pursuing war in a second march over the seas for as many years as those which he spent in conquering Troy.' 'instantem kühn statt instantis,' says Breiter. Postgate compares Prop.i. 20. 15-16 error Herculis fleuerat; cf. Rutilius Namatianus I-2 uelocenn reditum . . . mirabere . . . tann cito Romuleis posse carere bonis, where the personification of reditum (uelocem reditum $=$ me tam uelociter redeuntem) is even more bold. At 902 bella pugnantia is somewhat similar. bello: boldly of the
 which constitutes geminata agmina, a second campaign. But the two ablatives bello ... ponto are intolerably harsh: nor are the corrections ponti (Regiomontanus) (so Stoeber, comparing such phrases as leni fluit agmine Thybris), belli (Scaliger) satisfying. Stoeber explains instantem bello as $=$ ' that threatened to follow on the top of the war'.
 $\& c_{\text {.) }}$ ) is too far from the ductus litterarum. On the other hand, his geminataque Pergama ponto may very well be right; but not as 'a second Trojan war on the seas', rather 'Troy doubled by the sea', i. e. ten years on the sea added to the ten years at Troy. (Bentley found identically the same corruption-que Pergama and per agminain a Trinity College MS.) If this emendation is a true one, it would seem necessary to retain bello for the reason that ultima . . . arma in 6 seems to demand the progression (1) war at Troy, (2) war on the seas, (3) war at home.

The passage is discussed by M. Schmidt in Philologus, 1853, p. 752. Schmidt reads annis and (with Scaliger) belli: 'quanquam ferri potuit bello: sed uide Ovid. Am. 1. 1. 31; Met. 12. 21; Auson. Ep. 7. 7; Claud. Laus Ser. 27.' Incidentally he conjectures pello for bello, comparing $\pi o \lambda \iota \eta{ }^{2} \nu \bar{a} \lambda$ : and more plausibly innantem for instantem (thereby anticipating Postgate, cf. Juv. x. 257 Ithacum natantem). With pelago gem. p. aequora ponti cf. Lucr. v. 998 ; Tib. iii. 4.85 ; Virg. Georg. i. 469; Ovid Met. ii. 872.

The conjecture saeuo (Breiter) finds perhaps some support in Ovid Pont. iv. 16. 14 errantem saeuo per duo lustra mari (cited here by Bonincontrius).

Claudian must, I think, have had these lines in mind when at Laus Serenae 26-8 he wrote:
terrae pelagique labores
et saeui totidem bellis quot fluctibus anni coniugii docuere fidem.
7. quoi: Scaliger long ago corrected to quoi at 888 , where the MSS. have quod, and again at 868, where they offer qui. Other passages which point to the fact that Manilius wrote quoi not $c u i$ are iii. 674 (qui $L M$ ), iv. 535 (qui codd.), v. 743 (cui M). Birt, on Catalepton, ib. 6, where Haupt had emended qui of MSS. to quoi, announces his intention of 'forever repeating till people resolve to pay attention to it, that it is false to restore quoi for MSS. qui'. He points out that in the later Empire quoi had ceased to exist, but that $q u i$ for $c u i$ is very frequent in the texts of writers of that period, i: e. qui for $c u i$ is frequent precisely in those texts in which quoi can never have had a place. If in such texts one is content to restore everywhere cui for qui, why quoi in Virgil or Propertius, 'for quoi had already become cui in Republican times' (p. 50)? As a matter of fact quoi was still in use long after the time not only of Virgil, but of Manilius. Quintilian i. 27 says that quoi was taught to him as a boy, though the newer and better fashion of writing it is cui. But in attributing quoi to Manilius, I am guided not primarily by the $q u i$ of ii. 868 , iii. 674 , iv. 535 , but by the quae $=q u e$ $=q u o$ of ii. 7 , the quod ( $=q u o t$, as ii. $4=q u o i$ ) of 868 , and above all by the cui of v . 743. This last example is unmistakable. The accident which has preserved it to us may be compared with that which at Catullus xvii. 14 offers us cui iocum sit GO for quoi cum sit, or again at Cicero Fam. vii. 13. I quo in epicena for quoi ne Picena. See Friedrich's note upon Catullus lxiv. 219.

Conington at Virgil $E \subset l$. iv. 62, though he does not write quoi, holds that Quintilian had quoi ' in his copy' and (Quint. ix. 3. 8) mistook it for qui. This is a case where Birt's protest is in point. Such a view implies (1) that Quintilian had never seen but one 'copy' of Virgil, (2) that he was unfamiliar with quoi-a form perfectly well known to him, (3) that he had never heard discussed the interpretation of this much-vexed passage. Yet this view is taken even by Munro (Lucret. iv. 50). [Munro l.c. thinks it possible that Lucretius (and Catullus) wrote $q u i=c u i$ (cf. $q u m, q u r$ ). But inscriptions of the period have always quoi, never cui. See Lindsay Lat. Lang. pp. 445 sqq.]
cura petentum : the zeal of rival claimants to the honour of having given birth to Homer. The old correction iura petenti involves making posteritas in 9 the subject of dabat and eripuit in 8; so Gronovius, Breiter. This is intolerably harsh. Scaliger, followed by Stoeber and Ellis, finds the subject of eripuit in 'Homerus', referring petenti (ab quo ... petente, Ellis) to Ulysses. Of petendo (Bitterauf, Kleinguenther) one is surprised that it should have occurred to two scholars independently. On Bentley's patriam cui Graecia septem Koestlin (who calls it a 'glänzende und bewunderungswerthe Besserung') bases a conjecture of his own p. cui iniuria septem (Philol. xl, p. 182).



Seven Grecian towns contend for Homer dead Through which the living Homer begged his bread.
Stat. Silu. v. 3. 130... Maeoniden aliaeque aliis natalibus urbes
diripiunt cunctaeque probant: non omnibus ille uerus: alit uictos immanis gloria falsi.

10-1 I. See Quintilian, x. 1. 46. Bonincontrius compares Ovid Am. iii. 9. 25-6 a quo ... uatum Pieriis ora rigantur aquis. For the metaphor in prose cf. Vell. Paterc. i. 17 ingenia ex Socratico ore defluentia. 'And into little channels cut his stream, Rich in his store' (Creech).
12. Hesiodus: 12-18 the Theogony: quin etiam in 19 introduces the Works and Days. The whole passage 12-24 has been, however, the subject of considerable controversy. The discrepancy between the extant Theogonia and Erga and the Manilian was noted by Scaliger (see notes following). Scaliger sought to explain it by supposing that Manilius had confused the Hesiodic and the Orphic Erga (p. 103)a view refuted by Lobeck Aglaoph. i. 418. Others have supposed that Manilius had before him a Hesiodic Theogony of which ours is an abridgement, and the so-called Megala Erga. Others again have postulated the use (see 1. 18) of the Hesiodic Astrologia mentioned by Pliny. These views may be seen briefly discussed in Mure, Gk. Lit. ii, App. K, pp. 501 sqq., App. M, pp. 504 sqq. (I have not found the subject elsewhere treated in English.) The problem is interesting to students of Virgil as well as of Manilius and Hesiod. Some sensible remarks upon it are to be found in Heyne's Virgil, vol. i, 1830, pp. 275 sqq. The view that Manilius employed a (genuinely Hesiodic) Megala Erga and Astrologia has for its principal advocate the Catholic theologian J. L. Hug, who published in 1835 a doctorial thesis entitled Erga Megala (Friburgi Brisgouiae). Hug's thesis is criticized at length by Julius Caesar in Zimmermann's Zeitschrift für die Altertumswissenschaft, 1838, Nos. 65-7, pp. 529-51 (Ueber das angebliche Gedicht vom Landbau und die 'Megala Erga' des Hesiod). An excellent réstemé of the whole question is given in Marckscheffel Hes. Fragm. 1840, pp. 203-15. Most persons will feel it unlikely that Manilius employed neither our Theogony nor our Erga. Indeed if this is admitted the same must be supposed for Prop. ii. 34. 77-8, and Ovid Am. i. 15. 9-12, which represent our Erga as inadequately as Man. ii. $19-23$ (see n. 19 sqq.). The ancients were not careful to verify their references. Nicander Ther. 9 sqq. says, for example, that, according to Hesiod, the poison of snakes, \&c., came from the Titans' blood; on




 Man. ii. 13 (where see n.). (See also Lobeck ib. i, p. 307.) Nevertheless I think it at any rate possible that Manilius, while employing our Theog. and our Erga, may also have had before him the now lost Astrologia or Astronomia which passed under the name of Hesiod. This work was undoubtedly already extant in the time of Zeno ${ }^{1}$ (see Diog. Laert. viii. 1. 25, $48=$ von Arnim i. 276 ; Rzach Hes. Fr. 254). It was known to Callimachus ( $E$ p.29, Schneider), is referred to by Plutarch Pyth. Orac. 18, §§ 402-3, and Pliny N.H. xviii. 25. 213 , and quoted by Athenaeus (xi, p. $491 \quad c-d$ ), who, however, questions its genuineness. Schol. Arat. 254, Schol. Erga 382, Tzetzes Chil. xii. 169 sqq. mention an áбтрıкฑ $\beta i \beta \lambda$ os of Hesiod; and it might possibly

[^108]be inferred from Georgius Hamartolus (Chron. i. 26. 5) that the work was still extant in the ninth century. In any case it was a work well known in antiquity, studied by the Stoics and by the Alexandrians, and extant long after the date of Manilius. It is not unlikely, therefore, that e.g. ii. 18 may be a vague reference to the Hesiodic Astrologia. Manilius must have known of the book, and a reference to it here would be not unnatural. Such a reference would not be, as Zimmermann urges, inconsistent with 25 astrorum quidam, \&c.; for the despised astronomy of 25 sqq. is different in kind from the cosmogonic astronomy of 16 and 18 .
13. chaos enixum terras: cp. i. 125-7. Aliud agebat Manilius, says Scaliger. Hesiod does not say that Chaos gave birth to Earth ; he merely mentions a succession of Chaos, Earth, Tartarus, Eros (Theog. 116-19), and at Theog. 123 says that Night and Erebus were the children of Chaos. I would suggest that the diserepancy here between Hesiod and Manilius is not so much the fault of Manilius as of the Stoic authorities from whom he derives his physics, and may even be traced back to Zeno. I base this suggestion on the scholiast


 p. 157, No. 113, cf. No. 112). According to Mr. Pearson this passage 'shows clearly that Zeno must have rejected, or been ignorant of il. 118-19 of the Theog.' See Rzach ad loc. For Chaos $=\mathbf{v} \delta \omega \rho=$ rerum principium cf. Verg. Georg. iv. 382 and Nemesian. i. 35 rerum causa liquores.
14. primos ... cursus: Nihil tale in Theogonia, Scaliger, truly.

I have accepted Bechert's cursus for the corpus of MSS.-an improvement at any rate on Bentley's partus. But I think it possible that the true reading is in ortus ( $=$ iortus).
15. Titanas: De Titanibus nihil in Theogonia, Scaliger, falsely. Theog. 630 sqq. is so full upon the subject of the Titans that Scaliger's error is at least worse than any of the errors which he attributes in this passage to Manilius.

Iouis et cunabula: Theog. 474 sqq. (where $\sigma \pi a \rho$ gavícuóa in 485 $=$ cunabula). Scaliger is again in error. Touis cunabula, Prop. iii. I. 27.
16. sub fratre: Theog. 921. See on 3. Juno sui germana mariti (Ovid Fast. vi. 17).
sine matre : so Hug, approved by J. Caesar, Marckscheffel, Housman, Breiter, for the MSS. sine fratre. Theog. 924-6 (the birth of Minerva).

If sine fratre be retained the reference will then be to the birth of Hephaestus, Theog. 927-9, where at 927 we shall have to read, with
 then $\mathrm{be}=$ Iunonis quae sine fratre (i. e. $\Delta \iota i \operatorname{ov} \mu \iota \gamma \epsilon \boldsymbol{i} \sigma a$ ) Vulcanum peperit. Yet it seems difficult to refer uiri and parentis to other than the same person, viz. Jove. Hug, in correcting to sine matre, has entirely misunderstood sine fratre (Hug, p. 10). For sine matre cf. Ovid Fast. iii. 841-2 an quia de capitis fertur sine matre paterni uertice cum clipeo prosiluisse suo, and ib. v. 231 nata sine matre Minerua.
nomen, ' character,' as 636.
17. Bacchum: cf. Theog. 940-2. But Hesiod says nothing of Bacchus' second birth. Nemes. Cyn. 18 quis magno recreata tacet cunabula Baccho?
18. This line would more naturally follow upon 14. Apart from this, 1293 65

I see no reason for athetising it, as Breiter does. Manilius perbaps

 тá $\tau^{\prime}$ ò̀pavòs é $\sigma \tau \epsilon \phi{ }^{\prime} \nu \omega \tau a t$-which are at any rate sufficient to refute Breiter when he says 'über omnia sidera sagt Hesiod nichts'. Hesiod does not, indeed, say much about ommia sidera, but Manilius as an astronomer naturally makes the most of what he does say.

19 sqq . Not a very accurate synopsis of the Erga. Ceres (21) = Erga $388-95,465$ sqq., 597 sqq. ; Bacchus (20) 570-3, 585 sqq., 596; $611-14$ (some of these references I owe to J. Caesar l.c.) ; sacrataque flumina nymphis, perhaps 737-41. In 22 we have perhaps a mis-
 for 20-1, Prop. ii. 34. 77-8 tu canis Ascraei ueteris praecepta poetae, quo seges in campo, quo uiret uua iugo. Hug and Zimmermann add Ovid Am. i. 15. 11-12 uiuet et Ascraeus dum mustis uua tumebit, dum cadet incurua falce resecta Ceres.
20. quod: a rare example from the Augustan age of the use of quod with subj. for acc. and inf. But the passages which Breiter cites in support of it, Man. iv. 250 and Verg. Aen. ix. 289 (where quod depends on linquo not on testis; Madvig $O p$. 290), are obviously not parallel. An ante-Augustan parallel would be Plaut. A sin. 52 scio iann filius quod amet meus. But the usage is mostly a late one: as Ammianus Marc. xxii. 2. I addentesque quod cum uoce suprema successorem suae fecerit potestatis ; ib. 6. 3 pollicitus quod . . . ueniat ; Avianus Fab. i. I rustica deflentem paruum iurauerat olim, ni taceat, rabido quod foret esca lupo; Claud. Pros. iii. 223 nec credit quod bruma rosas innoxia servet; ; idem Epist. ii. 37-40 non ego . . . promisi gregibus pascua plena meis; nec quod mille mihi lateant sub palmite colles... nec quod nostra Ceres numerosa falce laboret. So i Cons. Stil. 18; iii Cons. Stil. 265 ; Laus Ser. 162-3. Many of the uses of quod which grammarians class with these examples are doubtful. In the more certain examples quod with the subj. seems to be put for the more normal accusative and infinitive (after verbs of knowing, teaching, believing, \&c.), where what is involved is the acceptance of a point of view (a theory, a doctrine) rather than of a fact.

Verg. G. ii. 112-13 apertos Bacchus amat colles.
21. Pallas: ' how vines in hills delight : how both with vast increase the olive fills,' Creech; who must clearly, therefore, have anticipated Bentley's Pallas for MSS. Bacchus. The emendation is certain. Yet 'reponendum auctoritate codicum omnium quod Bacchus utrumque', says the incorrigible Stoeber. Stoeber affirms ( $\mathbf{I}$ ) that the olive is never called Pallas by Roman poets; Pingré cites Verg. Aen. vii. 154 ramis uelatos Palladis omnis (hardly decisive) and Ovid Tr. iv. 5. 4 ut uigil infusa Pallade flamma solet; (2) that the olive non amat campos: Pingré refers us to Lucr. v. 1373-5 olearum caerula distinguens inter plaga currere posset per tumulos et conualles camposque profusa.
22. uagis . . . adultera pomis, 'ignobly mingled with now this fruit, now that'; i.e. that bore, through grafting, strange fruits. uagis: uariis, Du Fay; 'diverses espèces', Pingré; rather 'indeterminate', 'uncertain'. uaga autem dicuntur poma uelut uaga uenere prognata modo ex pirorum modo ex malorum et aliorum fructuum surculis ortum ducentia' (Hug, p. 13). Bullialdus quotes Pliny N. H. xvii. I arborum quoque adulteria excogitata sunt. Why he himself conjectures essent quod adulta racemis I do not understand.
23. Verg. Aen. vii. 137-8 nymphasque et adhuc ignota precatur
flumina; Ecl. v. 21 fumina nymphis (at end of line); Ovid Met. ii. 16 fluminaque et nymphas et caetera numina ruris. But cf. ib. i. 192 sunt rustica numina nymphae.
24. pacis opus : Calp. Ecl. i. 65 (of Numa) pacis opus docuit. In a different application the phrase recurs in Maximianus v. 2 (the business of arranging a treaty between East and West).
25. quidam : ut Aratus, Bonincontrius; Eratosthenem tangit, Scaliger. In thus attacking the popular astronomy (the legends of which he elsewhere (e. g.v. 538 sqq.) himself employs to good purpose), Manilius has a double object. He wishes (1) to emphasize the completely new character, the entire originality, of his own theme: he is primus ... nouis Helicona mouere cantibus (4-5) ; (2) to lay stress on the genuinely scientific character of astrology. Astrology, under the patronage of the Stoic philosophy, was just rising to a place among the sciences, and as this place was scarcely yet assured to it, the astrologers were anxious to assert their independence of whatever was either merely popular or at all fantastic. They are mathematici studying in numbers and their laws human fate. See Introduction, p. lxv sqq.
26. Cf. Verg. Aen. iii. 515 sidera . . . tacito labentia caelo; Ovid Fast. iii. 113 caelo labentia signa.
27. 'Referred each to its proper class and causes': i.e. classed them all and explained the causes of their becoming constellations. These causes are given in the ablatives that follow-poena (28), raptu (29), officio ... lacte (30), \&c., each of these ablatives being dependent grammatically on ductam in 31. It is, however, possible that these ablatives are governed by pendentia in 35 ; for pendere with abl. without preposition see on 947.

For the causae and genera of the constellations as they are variously given in the poets and mythographers see the laborious notes of Joh. Moeller, Stud. Manil. init.
causasque : as Ovid Fast. v. 697 dic, ego respondi, causam mihi sideris huius: causam facundo reddidit ore deus.

Andromedan: this form (a false Graecism: see on 365) seems to be upon the whole the best attested: cf. v. 23, 545 ; and is apparently preferred by Ovid (Met. iv. 671, 756). For the form Andromeden given here by Bentley, whom most edd. follow, I can find no justification. Andromedan is given by all MSS. at i. 356, v. 545.
29. solantemque : so Ven. rightly against the other MSS. Breiter and others retain soluentemque either as (1) soluentem uinctam uirginem, or (2) poenas soluentem-so at least Breiter. But (1) is historically false; Perseus, not Cepheus, soluit Andromedan, (2) is not Latin. Hyginus ii. 9-1 I.
raptuque: Bentley's necessary correction of raptamque; raptu falls into line with the other abll. poena, officio, pietate, \&c.

Lyc. natam: Callisto = Ursa Maior; Hyginus ii. I, p. 3I. I; ii. 4, p. 34. 22.
30. officio Iouis: quod olim Iouis nutrix erat (as also Callisto); Hyginus ii. I, p. 30. 4-3I. 3 (Bunte).

Cynosura $=$ Ursa Minor ; Hyginus ii. 2, p. 31.23 sqq. ; Fab. 224 (Bunte).
lacte Capellam : i. 366 nobilis et mundi nutrito rege Capella; Hyginus ii. 13 (Ovid, Manilius, and Pliny alone, according to Moeller, use the name Capella for Capra or Olenie).
31. furto: quia formam oloris indutus Iuppiter Ledam amabat, Hyginus ii. 8, p. 45. 11-13 (Bunte).
pietate : because Erigone $=$ Virgo $=$ Iustitia : see iv. 337 , where read qua custodito (fastidito MSS.) concessa est iure potiri (cf. Germ. Arat. 134), Hyginus ii. 4. 25 ; Fab. 130, 224 (Bunte).
32. Nepam: the Scorpion ; ictu: because he slew Orion; Hyginus ii. 34, p. 37. 7 (Bunte).
spolio: quod ab Hercule spoliatus est, Hyginus ii. 24, p. 66. 21-3 (Bunte).
33. morsu: the bite inflicted on the foot of Heracles when he was slaying the Hydra; Hyginus ii. 23.

Cythereide uersa: see iv. 800-1 ; Hyginus ii. 30. The connexion with the Euphrates seems to point to a Chaldean origin for this myth.
34. ducentem sidera: as i. 262 princeps Aries.
uicto . . . ponto : see iv. 747 sqq., v. 30 ; alibi, Hyginus ii. 20. 39. ritus pastorum : so Bentley for ritus pecorum or pecorum ritus of the MSS., cf. Sil. Ital. vii. 27-8 ritusque ducis. pecorum ritus (1) has rather the appearance of a mere attempt to emend ritus pecorum; and (2) it should, as Bentley says, naturally mean uitam et uictum pecudum; so Claudian vi Cons. Hon. 153-4 iura perosus ad priscos pecudum damnaret saecula ritus; Prud. Symm. i. 80 pecudes inter ritusque ferinos (cited by Bentley).

39-40. sonantem in calamos: Ovid Met. xi. 161 calamis agrestibus insonat; and probably Man.'s phrase is merely a variety for insonare calamis (dat.). Such an expression as i .34 I micantis in radios is hardly parallel, and should rather be compared with Verg. Georg. iii. 232 ; Aen. xii. 104 irasci in cornua; Stat. Theb. moriuntur in iras.

Sicula tellure creatus: Theocritus. The appropriateness of the selection of Theocritus in this place is not obvious. Homer is mentioned as the father of all poetry; but all the other references-save this to Theocritus-are to didactic poets. Theocritus is perhaps used merely to illustrate the fact that poetry can adapt itself to any kind of theme, however prosaic (siluestre) or difficult.

Creech's rendering is worth quoting:
The sweet Theocritus with softest strains
Thro' his smooth reed no rustic numbers move,
But all is tenderness and all is love,
As if the Muses sate in every vale,
Inspired the song and told the melting tale.
nec siluis siluestre : for siluestre in a disparaging sense cp. Calp. Ecl. iv. 12-13 siluestre licet uideatur acutis auribus; for the repetition ib. ix. 8 pueris iam non puerilia.
41. motus: as Verg. Georg. i. 350 det motus incompositos; Hor. Od. iii. 6. 21 .
42. arua : auras MSS. ; so aruis and auris are confused at Avien. Arat. 38.

43-5. alius . . . ille . . . hic. The reference is said by Scaliger and editors generally to be to such poets as Gratius Faliscus (43) and Aemilius Macer (44-5). For Gratius see Ovid Pont. iv. 16. 34. Macer is mentioned by Ovid at Trist. iv. 10. 43-4 saepe suas uolucres legit mihi grandior aeuo, quaeque nocet serpens, quae uiret herba, Macer (Macer's Theriaca and Ornithogonia). Similarly the author of the Preface to the second book of Cato's Disticha: quodsi mage nosse laboras herbarum uires, Macer haec tibi carmina dicit (3-4). The lines in Codex Turicensis 78 cited by Baehrens, Pref. to Sammonicus,
P.L.M. iii. 103-4, perhaps contain a reference to Macer (1-4, 11-12), and his poems were probably still extant in the time of Charlemagne.

Manilius possibly refers here also to Valgius; cf. Pliny N. H. xxv. 2; Quint. x. 1. 56. Bonincontrius and Huet, however, are perhaps right in supposing that Manilius is speaking rather of the Greek models of these poets, e. g. Nicander-(43 Theriaca, 44 Ophiaca: for Ophiaca see Schneider, pp. 37-42, who collects the fragments) whom Quint. l.c. mentions as the model of Macer and Valgius (Vergilius codd.).

46-8. Who the necromantic poets here referred to are it is impossible to say. The only Latin work upon necromancy known to us before Manilius' time is that of Appius Claudius-no doubt a prose workapparently dedicated to Cicero: see ad Fam. iii. 4. I ; cf. Tusc. Disp. i. 16.37 ; de Div. i. 58. 132. The references, however, in Verg. Ecl. viii. 95-100 alibi to the necromantic practices of Moeris are perhaps to be interpreted as referring to the necromantic poetry of some poet of the day. The Vergilian Moeris occurs in connexion with Pontus ; and the part which herbae, in this eclogue and elsewhere, play in necromancy makes it possible that the reference is to Aemilius Macer. The other Macer, the friend of Ovid to whom Pontica ii. 10 is addressed, is connected with Pontus, and the two poets may have been related (a suggestion which I find is already made by Scaliger Thesaurus p. 171 (1658)). The strong attraction which necromancy had for the Romans under the early Empire is very clearly reflected in the poetical literature of the period. See e.g. Tibull. i. 2. 45 ; Verg. Aen. iv. 490 ; Ecl. viii ; Hor. Sat. i. 8. 29; Epod. v. 29 sqq. ; Ovid Met. vii. 192 sqq.; Aetna 75 ; Lucan vi. 733; Sil. It. viii. 98 sqq. ; Val. Fl. i. 730 sqq.; Seneca Epigr. 16 (Baehr P. L. M. iv. 60); and the Thebaid of Statius and the plays of Seneca passim (as, Theb. iv. 418-645; Sen. O. T. 547). Appius not only wrote upon, but himself practised, necromancy-uti solebat (Cic. Div. i. 58. 132). Vatinius practised it with various magical adjuncts: Cic. in Vat. vi. 14 cum inaudita ac nefaria sacra susceperis, cum inferorum animas elicere, cum puerorum extis deos manis mactare soleas. A certain Junius (in connexion with the conspiracy of Libo Drusus) is mentioned by Tacitus (Ann. ii. 28. 3) as temptatus ut infernas umbras carminibus eliceret. Necromancy is probably to be understood among the infidas artes mentioned at 109-10-quarum est permissa facultas; and while speaking of necromancy among the Romans, I will, for convenience, say here what I have to say of that passage. Bentley's correction quarum haut permissa facultas is demonstrably wrong. Facultas non permissa sed legibus uetita est, he says dogmatically. But if I ask quibus legibus? neither Bentley nor any one else will name me any law at all directed against necromancy as such. The locus classicus upon the subject is Codex Theodosianus ix. 6 with the Commentary of Gothofredus, Leipsic, 1738, iii, pp. 131 sqq.; cp. ix. 17. 1, 38. 3; xvi. 11. 12; Cod. Justin. ix. 18; Novell. Valentin. iii. 23 (Mommsen and Meyer). ${ }^{1}$ The Roman state interfered with magical practices in general only when owing to them either the state itself or its religion seemed in danger, or when the person or property of individual citizens was attacked. Thus in 97 B. С. a Senatus consultum dealt with human sacrifice-a frequent accompaniment of necromancy, as may be seen from Cic. in Vat. and Hor. Epod. noticed above; to which add, from a later period, the reference in Justin Apol. i. 18 to émóntevers by means of 'pure' children, and in

[^109]Eusebius' account of Valerian (H.E. $480=331-2$ ) the similar mention of the murder of boys. But of necromancy, as such, there was a permissa facultas down to Christian times. The laws of maiestas and the Lex Cornelia de Sicariis were, under the Emperors, extended in such a way that they applied to certain offences arising out of necromancy. But the art, or science, was not in itself a crime. It was, in fact, precisely on a footing with astrology3 Firmicus (ii. 30.4) warns the astrologer not to inquire de statu reipublicae uel de uita imperatoris, and the necromancer in an earlier period had to observe the same circumspection (cf. Ammian. Marc. xxix. init., though here of Magic only). Both were diviners; but so long as they divined nothing which was injurious to the state, or its chief, or which threatened the life or fortunes of individuals, the law (the senatus consulta) touched neither of them. Under the Christian emperors interference went further. Yet Christianity and necromancy were not originally thus antagonistic. Justin (Apol. i. 18, noticed above) argues from the pagan belief in necromancy to the Christian doctrine of immortality; and in Dial. Tryph. 105 he recalls the Witch of Endor to like purpose. (In contrast cf. Tertullian De Anima 57 ; Apologet. 23 init.). ${ }^{2}$ In Firmicus i. 2. II necromancy is classed with sacrilege, murder, incest, paederasty :-illum quiescentium securas animas et iam Lethaei fumminis obliutione purgatas Mercurius cogit nefariis carminibus excitare; but the astrologer is not responsible for the necromant.

Among non-Christian sources for necromancy in the ancient world the most important are pseudo-Quintilian Declamatio xi-of uncertain date-and Apuleius de Magea.
43. Bentley's saecla for bella is perhaps right.

44-5. uenenatos anguis: Verg. Aen. vii. 753 sqq. wipereo generi et grauiter spirantibus hydris spargere qui somnos cantuque manuque solebat mulcebatque iras et morsus arte leuabat.
tnata per $\dagger$ herbas: perhaps damna per herbas; damna is used in the poets for almost any injury, in particular disease or plague, e.g. Ovid Pont. i. 10. 29. damna written data (as iv. 20 damno for dato codd.) may have been corrected metri gratia to the nata of our MSS. nata is obviously corrupt. The old way of construing it, 'the death and life born of plants bearing death and life in their roots' (fata uitamque à $\pi \dot{\delta}$ kotvồ with nata and ferentis) is altogether intolerable. If the words, as they stand, have any construction, it must be refert ea quae nascuntur per herbas quae fata uitamque sua radice ferment (Seneca Phoen. 149 herbas quae ferunt letum auferes?). Bentley's gramina et herbas is palaeographically poor. Breiter's prata per herbas, palaeographically better, stands condemned, as Breiter must know, by 53 .
46. Tartaron atra: Tartara natra (nacta) codd. For a similar confusion arising from the Greek acc. cf. Culex 270 Cerbera nunquaam most codd. for Cerberon unquam; Germ. 385 Gargaro nauti deus for Gargaron aut Ide.

46-8. Cf. i. 93-4.
47. reuoluunt : cf. Aetna 75 (Scaliger).
${ }^{1}$ Cf. Prudentius Symmach. ii. 894 inuoluit mathesi, magicas impellit in artes. Similarly Hermes, the inventor of Astrology, is the father of Magic ; id. Symm. i. 84 sqq.
${ }^{2}$ Where, perhaps, eliciunt for edunt: pueros elidunt is sound enough, and the reference is as in Justin Apol. i. 18; Euseb. loc. cit.; Hor. Epod. above.

49 sqq. Cf. Georg. iii. init.; Nemes. Cyn. init.; Aetna init. For coincidences between Aetna and Manilius see Breiter's note here. Breiter supposes much of the Aetna to be a criticism of Manilius, e.g. 225-50-a suggestion which has little value.
doctae : with a touch of contempt.
52. nota: here i. q. trita.
53. rorantis prata per herbas: cf. Lucr. v. 461 gemmantis rore per herbas. It seems unnecessary to take prata per together as $=$ per prata, though Manilius is fond of bold anastrophe: e. g. 905 medium post astra diem (where, however, see Ellis) ; iii. 521 numerari signa per horas. See Housman on i. 245, where true examples are mingled with spurious. At Stat. Theb. viii. 654 lacrimasque in lumina fudit the construction is clearly lumina fudit in lacrimas.
55. There is plainly some personal reference here, which we cannot recover (Stoeber). The uolucres durato ore are perhaps such poets as Gratius and Macer. Cf. Persius Prol. 12-14:

> quod si dolosi spes refulserit nummi, coruos poetas et poetridas picas cantare credas Pegaseium nectar.

Is 'ipse . . . Phoebus' Augustus?
57. ora: Bentley's orsa is hardly necessary; but of the passages cited by Breiter only iv. 441 nec parua est gratia nostrioris is relevant. Bitterauf compares i. I13; ii. 49-55, 137-40; iii. I sqq., 26-30.
58. opus: apparently 'original workmanship'; i. q. proprium opus Ovid Met. ii. 5 materiem superabat opus ('the craftsman's skill'); ' My verse shall be my own, not stol'n but wrought' (Creech).
59. propria rate: priua rate of inferior codd. Hor. Epist. i. I. 93 locuples quem ducit priua triremis.

60 sqq. Cf. i. 247 sqq. ; v. 864 sqq. (where at 890 read spiritus et totum ratioque infusa gubernent). Loquitur autem ex mente Stoicorum, Du Fay. Ex mente Posidonii eiusque uerbis, thinks Breiter. Aen. vi. 724 sqq. (Bonincontrius), where the same doctrine finds expression, has been likewise referred back by Norden to Posidonius-as though, outside Posidonius, there was no Posidonian doctrine or phraseology. Who shall say how many influences meet in Wordsworth's

## ' I have felt

A presence that disturbs me with the joy
Of elevated thoughts, a sense sublime
Of something far more deeply interfused, Whose dwelling is the light of setting suns And the round ocean and the living air And the blue sky, and in the mind of man, A motion and a spirit that impels All thinking things, all objects of all thought, And rolls through all things'?
And why should we narrowly confine the spirit of Vergil or of Manilius?
63. mundum : ròv Kó $\sigma \mu o \nu$. For the Stoical uses of mundus, кó $\sigma \mu$ os -all of which are found in Manilius-cf. Diog, vii. $137-8$ $\lambda$ éyovaı $\delta \dot{\epsilon}$





With 63 cf . i. 64.
alterno: uicissim ex mutua concordia, Du Fay. uiuere,
入oyıkóv (prudentia 69), Diog. vii. 139.
uiuere : the infinitive depends on canam (60). For the infin. used thus as substantive cf. iv. 37-42 referam . . . accepisse (Cramer Der Infinitiv bei Manilius p. 74).
 305. Compare, for the whole passage, Alex. Aphr. De Mixt. 142 a

 ícrıv autề tò $\pi a ̂ \nu$ (Zeller Stoics, E.T. p. 123).
-67. cognatis: confederatis inter se, Du Fay; rather $\xi v y \gamma^{\prime} v e l a ~ t h a n ~$
 quotes Cic. $N$. D. iii. § 28 oratio de conuenientia consensuque naturae quam quasi cognatione continuata conspirare dicebas . . . negabas id accidere potuisse nisi ea uno diuino spiritu contineretur, which is 'aus derselben Quelle' as Manilius.
69. prudentia: here, as Bonincontrius notes, used with consciousness of its etymology (pro-videntia). So Verg. Georg. i. 416; Juv. x. 365.
censum : a peculiarly Manilian word. It means :
(1) wealth, or revenue, in the literal sense, as 823 ; iv. 11, 126, 172, 192, 272, 538, 693 ; v. $279,370,388,529$.
(2) wealth, metaphorically, glory, brilliance, as here mundi censum; i. 11 aethereos census; iv. 877 mundi census.
(3) rank, position: as iv. 507 contenta suo ... censu; v. 720 censu . . . imo.
(4) properties, qualities, gifts, possessions : as 167 toto gaudentia censu ; 457 censusque sui.
(5) ability, competence : as 110 nostri munera census; 888 censum linguae Graiae; so perhaps i. 794 censu Tullius oris emeritus caelum, but this is perhaps as near to (2) or (4).

At iii. 72 hominis censum embraces (1), (2), and (4).
71. sensu cassus est, Postgate; but I cannot see any difficulty (eriaretque, Postgate). uagus: motu cursuque uolans, i. 197. Germ. Arat. 17 has 'uaga sidera', not of planets; and so Ovid Fast. i. 310 uaga signa. Catull. lxi. 117 uaga nocte has, perhaps, a hint of astronomy.
72. sua: sua pro eius positum falsarium arguit et illum quidem Latine nescientem, Postgate. Housman (C.R. xiv. 31) tries to defend sua, and indeed marvels that Bentley should have suspected it. He compares Ovid Fast. vi. 413 aquas sua ripa coercet, which I think rather different; and more plausibly Germ. Arat. 176-7, where, however, punctuation and interpretation are both uncertain. He interprets here dispositi cursus sua sidera desiderarent, acciperent aliena. I do not feel satisfied; but I prefer this at any rate to Bechert, who takes sua as $=$ sui iuris. Perhaps stata $:$ Censorinus $D . N$. viii. 2 stellis tam uagis quam statis.
73. Cf. Sid. Apoll. ix. 113 Titan curribus occidens ad ortum Conuiuam fugeret, diem fugaret (Stoeber).
 Diog. vii. 135. Cf. deus et melior . . . natura, Ovid Met. i. 21 (Bonincontrius).

83 sqq. In the illustrations that follow we may detect the Stoical
progression from $\psi \iota \lambda \grave{\eta} \tilde{\epsilon} \xi \iota s$, inorganic nature, to $\phi \dot{v} \sigma \iota s$, plants, \&c., to
 Sext. Math. ix. 81.
83. ducit: regit, gubernat, Du Fay. No, 'derives': the deus-etratio derives the living creatures of earth from the constellations; as i. 18 generetque suis animalia signis. The stars are simply said to give birth to living things as men born under this or that star are said elsewhere (e.g. 5, 6) to be born from it. Both Breiter and Pingré, however, take ducit $a b$ as 'makes dependent on'; but why should it, and how can it, mean this?
84. quae signa, quamquam longo recessu sunt summota, tamen sentiri cogit. I see no difficulty here. Yet Bentley, followed by Breiter, puts a comma at recessu, and explains sentiri as infinitiuo modo absolute : hoc est sentivi tamen facit uel possunt. Ellis prefers to take the sentence as I have taken it; though he thinks it possible that sentiri is inf. in Or. Obl. and posse ad opiniones referri quae uersibus 82-3 traduntur. But he rightly calls this durior structura. Placing a comma at recessu, Bentley emends cogit to condit; cf. ii. 374. Ellis renders cogit by stipat; Breiter offers no interpretation; 'draws into relation with one another' (in consensum cogit, almost) seems more likely than stipat.
longo summ. recessu: cf. 681 and iv. 861. recessus merely 'distance', as Lucan iii. 477 ex longo missa recessu. Verg. Aen. viii. 193 spelunca . . . uasto summota recessu is somewhat different.
87. nimis: no better defence of the MSS. minus is offered than that of Bonincontrius, who explains, quamuis signa et stellae faciant quae diximus corpora, non tamen minus est quaerenda fides a deo tanquam a datore omnium. I have accepted, therefore, Bentley's nimis, though I do not feel it to be entirely apt. I at one time conjectured procul, supposing minus to be a glosseminus, indicating that procul should be taken not as 'far away', but 'from far away'.
89. sic pontum mouet: on the phenomenon of the tides as a stock proof for astrologers of the $\xi v \mu \pi a \dot{a} \epsilon \epsilon a$ of the universe see Aulus Gellius xiv. 1. 3 ; Firmicus i. 4.4 dic mihi quis in caelo iter maris uidit (where Dressel's Martis is an incredible conjecture).

90-2. haec seditio $(90)=$ seditio ex eo orta quod alternation pontus immittitur et aufertur; i. e. haec seditio means little more than 'the phenomenon of the tides'. The tides affect, or 'possess', the sea at one time under the influence of the full moon (sidere lunae $=$ when the earth gets the moon's light), at another time under the influence of the moon's withdrawal to the opposite quarter of the heaven, i. e. to that quarter where it is no longer a sidus to the observer on earth. It is at the full, is a complete sidus, when it is furthest from the sun. Its diuersus recessus, its withdrawal to an opposite position, lies in the point at which it is nearest to the sun and not seen from the earth. Manilius means, therefore ( $90-1$ ), that the sea is affected by the tides at the full moon and the new moon. These are, in fact, the tides which would attract the observation of a dweller on the Mediterranean ; the others, so noticeable to us, would hardly count for him. (The ancients remarked the immense tides in Britain, Pliny N. H. ii. 97, 218.)

90-1, then, simply say that there are lunar tides, specifying the two most noticeable-those at the full and the new moon. The other lunar tides, however, are accounted for in 92 , which merely notes the effect of the sun in counteracting the attraction of the moon. The sun and
moon, of course, each independently influence the tides. Each by attraction raises the ocean in the direction of itself; and at the same time the mass of earth on the side furthest from either sun or moon feels the attraction of either body more than does the sea on the same side, and so is drawn away, producing the apparent effect of a rise of ocean (or tide) at the end of earth most remote from sun or moon. The attraction of the moon ${ }^{1}$ is greater than that of the sun because by its less distance from the earth it more than compensates its inferiority in size to the sun. When the sun and moon act along a straight line (i. e. when the moon is furthest from, or nearest to, the sun), then the tides are greatest ('spring tides'). When the sun and moon act at right angles to one another then the tides are least ('neap tides'), because from the attracting power of the moon that of the sun has to be subtracted.

92, therefore, remarks the effect of the sun in producing neap tides. Manilius, in fact, is saying nothing more complicated, or philosophic, than Lucan i. 413-16 an sidere mota secundo Tethyos unda uagae lunaribus aestuet horis, flammiger an Titan, ut alentes hauriat undas, erigat oceanum. It may be noticed in passing that Lucan's. sidere secundo explains the bare sidere of Manilius.

Both the older, and more recent, commentators have introduced considerable confusion into this passage, the former by mistranslating the Latin, the latter by attempting to force Manilius into conformity with Posidonius. Scaliger and Du Fay both take recessu in 91 of the ebb of the tide. (Scaliger might have learnt better from the despised Bonincontrius, who avoids this error.) Neither of them, however, cite in support of this-as they should have done-Cicero de Div. xiv. 34 aestibus ... quorum accessus et recessus lunae motu gubernantur, a passage which Manilius would almost seem to have had before him in writing this; not only is the general theme of the two passages (the cognatio-de Div. $\S 33$, cf. cognatis here in 67 -of the different parts of the mundus) the same, but in §33 Cicero actually cites the fact, or fancy, noted by Manilius at 94 , where see note. Yet despite this close relation of the two passages, recessu in our present passage cannot refer to the movement of the sea, but must refer to that of the moon. A moment's reflection should satisfy any one that it is nonsense to speak of the seditio pelagi (the rise and fall of the tides) as stimulated by the recessus, the fall of the tides. Yet this nonsense Du Fay gravely repeats from Scaliger. Huet and Bentley appear to have understood the passage. But-Pingré seems to be the first after Bonincontrius (who has, however, not understood the passage) to define precisely the meaning of recessus. Breiter's 'Abnahme' is more or less adequate. sidere and diuerso recessu give us two opposed points in the moon's course-its greatest and least distance from the sun.

Cicero de Div. ii. 42.89 uses recessus, as it is here used, of the motion of a planet : caeli conuersiones commutationesque tantae fiant accessu stellarum et recessu. For diuerso, 'diametrically opposed,' cf. 280 diuerso conspicit ortu.

Breiter's view of this passage is vitiated by his passion for 'Quellenforschung'. According to him 89 gives the $\dot{\eta} \mu \epsilon \rho \eta \sigma i a$ кiv $\nu \sigma$ ts
 with Posidonius-or very nearly, for Posidonius introduces the winds,
${ }^{1}$ The moon's tide is about two and a half times as great as the sun's.
and this contributing force 'fehlt bei Manilius'. How false this interpretation is any one can see at once who has read the preceding notes. If we attend simply to what Manilius says, we shall see that 89 merely notes the phenomenon of the tides in a purely general way; 90-1 notes that the tides are greatest at full and new moon; 92 notes the operation of the sun as producing neap tides.

93-4. sic ea animalia quae fretis submersa sunt et carcere concharum clausa, \&c. Breiter quotes Cic. de Div. ii. 33 ; Pliny N. H. ii. 109, to the effect that (according to Stoic beliefs) shell-fish grow and diminish as the moon waxes and wanes. But the belief is as old as Lucilius apud Gellium xx. 8. I transcribe the whole passage in Gellius (Annianus bade his friends to a feast)-ibi tum cenantibus nobis magnus ostrearum numerus Roma missus est. quae cum adpositae fuissent et multae quidem, sed inuberes macraeque quaeque essent, ' luna,' inquit Annianus, 'nunc widelicet senescit; ea re ostrea quoque, sicut quaedam alia, tenuis exuctaque est.' Cum quaereremus, quae alia item senescente luna tabescerent, 'nonne Lucilium,' inquit, ' nostrum meministis dicere

## luna alit ostrea et implet echinos, muribus fibras et iecur addit?

eadem autem ips quace crescente luna gliscunt deficiente contra defiunt.' (Similar effects with cabbage and cats-eyes.) Compare also Plin. N. H. ix. §§ 53 and 96 . In Greek I have noted Sext. Math. ix.

 Mr. Phillimore compares Aelian Nat. An. ii. 35, ix. 6, xii. 13.

Huet says that this belief was still a lively one in his own day. He himself made a number of observations to test it, but the results tended to discredit popular opinion.
-96. perdis in oribus: if Manilius did not write this (Bentley's emendation of reddis curribus) he should have done so. As Bentley says, illa antitheta et argutiae apud nostrum ià $\pi a ́ v \tau a ~ s u n t . ~ M a n i l i u s ~$ means that the moon loses its light as it draws near to the sun and regains it-from the sun, ex eisdem-when it withdraws from the sun.
97. reliquit, 'loses', ' is deprived of'; for this sense of relinquere cf. Stat. Theb. i. 72 oculosque . . . reliqui (of Oedipus) ; Pliny N. H. ii. 92 ueneficium quo Cl. Caesar imperium reliquit.
99. denique sic pecudes: Cic. N. D. ii. 29 omnem enim naturam necesse est.. . habere aliquem in se principatum, ut in homine mentem, in belua quiddam simile mentis, unde oriantur rerum adpetitus.
103. Plin. N. H. viii. I Auctores sunt in Mauritaniae saltibus ad quendam amnem, cui nomen est Ancilo, nitescente noua luna, greges elephantorum descendere: ibique se purificantes solemniter aqua conspergi, atque ita salutato sidere in siluas reuerti (Scaliger).
104. Cf. Verg. Georg. i. 373 sqq., where Vergil, while he notes, like Manilius, the fact that animals have prescience of the weather, is careful to deny the Stoic inference that this is due to their sharing in the anima mundi-415-16 haud equidem credo quia sit diuinitus illis ingenium. One can hear him at haud equidem credo closing his Posidonius with an angry snap. Man. iv. 914 auiumque attendere cantus.
106. consilium $=$ csilium $=$ eximium (MSS.). consilium was suggested to me by iv. 900 (the whole of iv. 876 sqq. is closely parallel). (At iv. 42 exilium regi is similarly corrupted from consilium regni.) subauditur tò cui, says.Scaliger of the construction. No: consilium
...to to animum is semi-parenthetic; then the quem carries us back rather abruptly to hominem in 105; quem denique in unum descendit deus . . .eum quis dubitet caelo coniungere?

I formerly, to avoid the awkwardness which this involves, proposed, for eximium, eximo quod (i. q. mitto quod) with quod denique in 107 (C. Q. April, 1908). But we must remember that the Astronomica is an unfinished work, and this passage, like a good many others, has not received Manilius' ultima manus.

Breiter retains eximium, as a subst. =eximias res-to which I know not what to say. (Seneca Phoen. 238 et ingeni solertis eximium decus.)

105-14. The connexion of ideas is very obscure. Man has affinity with the divine mundus. Seeing that the animals have this (=post haec, 105), then so a fortiori must man. But, apart from this, nature has given him purpose and speech and intelligence and a swiftness of spirit, which shows the presence in him of God. Man seeks God : but he can only do so because God guides his seeking. God seeks himself (se ipse requirit) in man's seeking of him (106-8). That it is God that guides man's seekings we may see pre-eminently (putting aside other indications-mitto.. . . mitto-omitting what is noted in 109-14) from the study of astronomy (115-16); for who could hope to find the mundus nisi qui pars ipse deorum est? In 109-14 proofs that man's search is directed by God are found in certain arts other than astronomy (alias 109), yet these, though permitted to man, are uncertain (infidas) and not wholly within human competence (ino); therefore Manilius will not press them into the service of his argument (mitto). Moreover, nothing in any department of human inquiry has been granted to us aequali sub lege-all clear and in order (111); our authorities are not men of the highest talents (112); how then could we hope to find God unless God guided us? Yet this argument also mitto. Again, fate is fixed and inevitable; it belongs to the mundus to compel, to materies to be compelled (113-14). Yet man's search for God show's that he is not mere materies, but pars mundi.

In the above analysis I have italicized those amplifications of Manilius' argument which it seemed to me necessary to make in order to bring out the connexion of ideas. But I am bound to say that the more I reflect on this passage the more obscure I find it.
108. descendit deus: uel uaticinatus est de Christo uel dic appellare animum nostrum deum, Bonincontrius.

Seneca Epp. xxxi. II quid aliud uoces hunc quam deum in corpore humano hospitantem? 'In Man the god descends, and joys to find The narrow image of his greater mind '(Creech).

Cf. iv. 910 (the converse of this).
109. mitto : this form of address, in the first person, is not, I think, found elsewhere in Manilius. Yet mitte can hardly be right. See Jacob's note. For mitto see L. Mueller De Re Metr. p. 337 (1861). III. aequali lege: as 233 .
tributum : i. q. permissum, as 605.
112. pectoris: corporis codd. The confusion is a common one even in good MSS.
113. fatum : Lact. Instit. iv. 9 Zeus rerum naturae dispositorem atque opificem uniuersitatis तóyov praedicat quem et fatum et necessitatem rerum et deum et animum Iouis nuncupat.



datum est is clearly preferable to sat est, which probably arose from fatum est. 'sat, licet priori uersus colo conueniat, non conuenit secundo sat est cogere mundo,' Bentley. But sat, if the argument is correctly analysed above, is not conueniens even to the first limb of the verse.

II5-16. These were the lines which Goethe inscribed in the Visitors' Book on the height of the Brocken, September 4, 1784. See Kraemer Ort und Zeit der Abfassung der Astronomica des Manilius, p. 24; Ellis N. M. viii-ix. Manilian students owe this interesting detail to the late Cuthbert Shields, whose brilliant mystical genius had so strong an affinity with the sentiment of these two lines. Pliny N. $H$. ii. 26. 24 echoes both the thought and language of Manilius: Hipparchus nunquam satis laudatus, ut quo nemo magis approbauerit cognationem cum homine siderum animasque nostras partem esse caeli. Cf. Cic. N. D. ii. 37 ipse autem homo ortus est ad mundum contemplandum et imitandum, nullo modo perfectus, sed est quaedam particula perfecti.
119. stellis aduersus sidera bellum : stellis, sc. uagantibus, i.e. planetis; sidera, the fixed constellations. Cf. i. 15 signaque et aduersos stellarum noscere cursus; v. I, 2 signisque relatis quis aduersa meant stellarum numina quinque.
sidera and astra are used by Manilius as a general expression for heavenly bodies, whether isolated stars or constellations; signum is always a constellation; stella is either a single star in a constellation, or else, as here, a planet. Occasionally it is doubtful whether astra are planets or constellations, e.g. ii. 687, 737. At i. 331, 471 signum seems to be used of a single star; but in each case the text is suspect.
120. On this verse, rejected by Scaliger ('Pedaneus grammaticus iudicauerit ab indocto huc infartum'), defended by Huet, pronounced by Stoeber uersus satis Latine scriptus, Bentley's note is final. Huet, in opposition to Scaliger, who could find no sense in the line, interprets it caelo subiectas terras ac maria et quae mari ac terrae subiecta sunt. Vide, says Bentley, studium partium et obtrectatio quid facit. Talemne uersum condidisset Huetius, ipse bomus poeta sed et in hac laude Scaligero minor? Quisquamne, cui ullus Latinitatis sensus est, idem esse dixerit, terras caeloque fretum ac terras fretumque caelo? subiecta in posteriore colo ad prius colon reduxerit? Quaenam uero illa sunt subiecta utrisque, terris scilicet et freto? Nihil nisi caelum ipsum, cum terra in medio sit ex mente auctoris. Quare aufer hunc a uiris summis succum loliginis: et statue hunc uersum spurium esse et irrepticium. The line stood at the foot of fol. 240 v . in the archetype. See Introduction, pp. xxiv sqq. It was perhaps modelled on Ovid Met. ii. 5-7.
123. ad ipsam $=$ ad se ipsam. For the Manilian use of ipse see especially i. II, 288, 290 ; ii. $507,607$.
124. caeloque : from heaven, as 859 , where see note; Catullus lxiv. 300 caeloque aduenit.
128. in orbem: sc. terrarum. The construction is et mundum uelut captum in terrarum orbem, h.e. in semet, deducere. Cf. i. I-3 artes . . . deducere mundo.
130. ipsa fides: interpretetur qui intelligit, says Scaliger, who writes ipsi res; to which Bentley rejoins ipsa fides perinde est ac res ipsa: ipsa scilicet experientia, ipse euentus. Scaliger might have cited Lucr. v. 104 dictis dabit ipsa fidem res. Bentley might have noted that the very phrase fides operi-fides being used, as here, for
experientia-occurs at Statius Theb. ii. 289 prima fides operi; and might perhaps have compared Aetna 223 nosse fidem rebus. The play fides ...fides is just Manilianae argutiae once more. (Ellis takes fides as =ajıomırvia naturae, somewhat differently.). ipsa fides faciet operi probationem. pondus, efficaciam. fidem, experimenta, Bonincontrius.
131. nam neque decipitur ratio: ratio is the oboòs $\lambda$ óyos of the Middle Stoa, the infallible 'criterion' by which Panaetius and Posidonius replaced the naively materialistic 'кагá $\lambda \psi \psi \iota s$ ' of the earlier Stoics; Schmekel Die Philosophie der mittleren Stoa, 1892, p. 354 foll.
132. sequenda: this (Du Fay?) and not secunda (Bentley from the Edd. uett.) is the true correction of the MSS. secunda. Non hic loquitur Manilius de noua uia inquirenda astronomiae: sed docet astronomiam sequendam esse quippe quae a ueris causis ducta fidem sibi ideo conciliet, Ellis, aptly.
ueris accredita causis: so I have written for the MSS. ac ueris credita, which Breiter against all reason retains (cf. Aetna 445-6 spectataque ueris occurrit signis). If this alteration is thought too violent, we should read with Ellis a ueris.

134-5. Cf. Verg. Georg. i. 463-4 solem quis dicere falsum audeat?
135. uincere: i. q. reuincere, refellere.
136. cum ad sidera: Manilius rarely elides a monosyllable, and when he does so it is always either, as here, before a monosyllable, or before a word the first syllable of which is a monosyllabic preposition (as iii. 194 at cum obducta), except for four examples, i. 287 sed cum aer, iv. 547 cum autumnales, and twice before omnia (ii. 749, i. 770). In all four examples the syllable elided is not long but mediate. Many alleged examples are false: as ii. 171, 924, where see notes; iii. 343 uide Breiter; iv. 53, where I believe we should write quin etiam and bracket the whole line.

On the subject of elision of long syllables generally in Manilius see note on 747. I think that no one who reads this note and that one will find it easy to persuade himself that so fastidious a metrist, or rhythmist, as Manilius was the stammering African-or Asiatic or Gaul-that some critics have seen in him.
138. in orbe: not in orbe terrarum (as per orbem, 144), nor in orbe signifero; but any circular course, a chariot course.
139. liber agam currus: so Bentley, for the ubera tam currus of $M L^{1}$. The umbrato curru of $G L^{2}$, though accepted by Gronovius (arcuato et clauso, Gronovius) is clearly here inapposite; and the same is true of Breiter's librato curru. Manilius' chariot is not, as Breiter's note suggests, one of the heavenly bodies, nor (see on 128) travelling through heaven. Moreover, without some verb in the indic. mood between condam (137) and canam (141) the balance of the sentence is, as Bentley observes, completely destroyed. Cf. Lucr. vi. 47 insignem conscendere currum, \&c.; Nemes. Cyn. ix. iuuat aurato procedere curru (all Nemesianus' Prologue owes something to Manilius).
141. mirantibus: rex(ress $\left.L^{1}\right)$ antibus $M L^{1}$ is unexplained. For Ellis' rixantibus we might perhaps compare Pliny N. H. ii. 43. II3 (the air from the earth, depressed by the stars) nube cohibitum tonare, natura strangulante sonitum dum rixetur, edito fragore cum erumpat'. But the nature of this heavenly rixa is there clear enough.
142. uel (canam eis mirantibus hominibus) quibus illa (astra) non inuidere sacros meatus et notitiam sui ( = notitiam suorum sacrorum
meatuum). Ellis, however, finds the antecedent to quibus in carmina (142) (Hermathena, 1893, p. 263 sqq.). Bonincontrius takes sacr. meatus apparently as =meare inter sacra astra.
144. minima est quae turba: Verg. Aen. vi. 6II quae maxima turba est.
per orbem, 'on earth.' See on 138. The twofold sense of orbis, 'earth' and 'heaven', is sometimes a source of confusion in other authors than Manilius. Thus, at Seneca, Herc. Oet. 844 (reddendus orbi est), orbi means 'heaven' and not-as Leo apparently, i, p. 53'earth'.

145 sqq. Cf. Seneca Q. N. Praef. 7. illa: sc. turba.
fluit : Du Fay, Bentley, \&c., take fluit as = abundat, numerosa est, which Bentley, of course, sees to be impossible; 'hat keine feste Richtung, schwankt haltungslos,' Breiter, comparing iii. 524, iv. 377, which are in no sort parallel ; 'fleets on unconcernedly,' Ellis. fluit, if genuine, must, I think, be = perit or lente perit, for which sense see L. \& S. s. v. Of emendations, fugit is, in the context, meaningless, frequens palaeographically useless.

Bentley obelizes this and the two succeeding lines ; this, on account (1) of fluit; (2) of the tautology diuitias . . . aurum-which might perhaps be got rid of by writing aulam for aurum-the succeeding line for no reason at all, 147 on account of aduersa, of which diuersa seems a satisfactory correction. Ellis's diuisa is based on Hor. Od. i. 15. 15 carmina diuides. Breiter's retention of aduersa passes belief. At 287 the MSS. vary between diuersa, aduersa, diuisa; cf. Stoeber ad loc.
149. a fato datur, fata discere, Scaliger. Cf. iv. 118 hoc quoque fatale est sic ipsum expendere fatum.

150-269. Manilius now passes to a classification of the signs of the Zodiac. His classification has its basis for the most part in nothing more scientific than the configuration of the signs as pictorially presented. Bouché-Leclercq says truly: 'Rien ne montre mieux sans doute l'ineptie foncière et incurable-mettons la naïveté-de gens qui prenaient pour œuvre de nature, susceptible d'engendrer des rapports naturels, le produit de la fantaisie la plus capricieuse' (Astr. Gr. p. 149). The classification, however, into masculine and feminine, and again that into nocturnal and diurnal, forms an exception, being based on geometrical principles. Geometrical principles likewise determine the position assigned to Virgo in 175 sqq. The system followed by Ptolemy rejects the pictorial principle wholly, and has its basis purely in geometry. And it is clear from Manilius ii. 175-96, 664-70 that he knew the classification adopted by Ptolemy. On the whole subject see Bouché-Leclercq, pp. 149 sqq.

Manilius is concerned to specify the following classes (other divisions and subdivisions are found in other astrological writers):-(1) masculine or feminine, $150-4$; (2) human or bestial, $155-8$; (3) single or double, 159-96; (4) auersa or recta, 197-202; (5) nocturnal or diurnal, 203-22 ; (6) marina, terrena, or ambigua, 223-32 ; (7) fecunda, sterilia, or communia, 233-43; (8) currentia, stantia, sedentia or iacentia, 244-55; (9) mutila or integra, 256-64 ; (10) uerna, aestiua, autumnalia or hiberna, 265-9.

Breiter follows Boll in making Asclepiades of Myrlea (100 B. C.) one of Manilius' sources here. But many of the classes recognized in Asclepiades are absent from Manilius, and in the paucity of astrological remains of a date prior to Manilius it seems dangerous to regard as
peculiar to one accidentally surviving authority matter which may very well have been common to many writers.

From $150-269$, it should be noted, the signs are considered individually; in what follows, 270 sqq., they are treated of in their combinations.
150. Cf. Verg. Georg. ii. 9 Princitio arboribus uaria est natura creandis. et primum : Manilius, as Breiter points out, here first passes from astronomy to astrology.

If it be asked why Manilius assigns a prior importance to the distinction of sex rather than, as might seem more natural, to the distinction of human or bestial, the cause lies in the planets. The distinction between human and bestial signs is extremely powerful in determining love and hate among the signs themselves; but the sex of the signs determines the loves and hates both of the signs and of the planets. Manilius never gets to the planets, but he cannot but write always with his eye upon them.
151. genus, 'sex,' as appears from the next words. The determining principle of sex among the signs is purely mathematical. The uneven number is always, according to the Pythagoreans, masculine, the even feminine. And this doctrine, transmitted to astrology by the Platonizing Stoics of the Middle Stoa, determines the sex of the signs. The first sign, Aries, is masculine; the second, Taurus, feminine; and the same alternation prevails throughout the circle.
152. principe Tauro: Taurus is princeps femininorum, as Aries is princeps omnium signorum (i. 263, Germ. 502). Of old, indeed, Taurus was princeps absolutely. Verg. Georg. i. 217 candidus auratis aperit cum cornibus annum Taurus; Schol. Germ. Breysig p. 16 Nigidius Arietem dicit ducem et principem signorum.

Various mythological explanations have been essayed of the sex of Taurus. Breiter holds that Manilius identifies Taurus with Io; see Hyg. ii. 21 ; Eratosth. 106-7. But since Manilius elsewhere (as Germ. 536; Hyg. ii. 21) plainly identifies Taurus with Europa's Bull (see ii. 489-90), Breiter is obliged to suppose that he here follows a 'special source'.

Taurus is by other authorities identified with Pasiphae's Bull, and again with Apis. Bouché-Leclercq supposes that all these different views amount in themselves to very little; while what emerges is that Taurus is originally the vehicle of a moon-deity and love-deity (Astarte-Aphrodite). The Pleiades-the doves of Venus-connect naturally with a love-deity.
153. auersus: a necessary correction of aduersus; the same confusion, in the same connexion, is found at Verg. Georg. i. 218 (where auerso . . . astro refers to Taurus and not, as Conington, \&c., to Canis), Ovid Met. ii. 80 ; Man. i. 264, v. 140.
Tauri is est situs ut posterioribus carens ab eis tamen exsurgat, Du Fay. Scaliger quotes Ovid Fast. iv. 717-18 uacca sit an Taurus non est cognoscere promptum; pars prior apparet, posteriora latent. The epithet auersus, and its suggestions, attached, for astrologers, the imputation of vice to those born under Taurus: cf. in this connexion iv. 52I, v. 194. See Salmasius Anni Climacterici (1648), Praef. p. 7 .
redeundo: cum redit in signiferum: in oriendo.
in arcum : quia kvpтós, Scaliger, who, perhaps rightly, suspects the text. Du Fay takes arcum as $=$ circulum (signiferum) without authority from Manilius. Perhaps Bentley's auersos artus is
right ; cf. v. 140 Taurus in auersos praeceps cum tollitur ortus-where, for ortus, Bentley writes artus.
154. in orbem : right round the Zodiacal Circle.
155. The humanae species are Gemini, Virgo, Libra, Aquarius.
in parte $=$ in aliis, as pars $(156)=$ alii.
156. nec mores distant: sc. $a b$ humanis moribus; he means the mores which they give to men; as appears from the converse ingenium facient in 157.
157. quaedam: I have adopted Bentley's correction of the MSS. quae iam. singula quaedam will then be such signs as are not treated in 159-95, viz. Aries, Taurus, Cancer, Leo, Scorpion, Libra, Aquarius.

If quae iam be retained, as Breiter, e.g., retains-though he does not explain-it, the construction can only be : ea quae iam sagaci animo signanda sunt singula sunt, ea scilicet quae propria sorte feruntur'the signs which you have at this moment (at once, opp. to nunc "passing on ") to note carefully are single ones, those, namely, which as they move in heaven have individual properties and influences.' For the order of the words in the Latin see i. 58-9 postquam omnis caeli species, redeuntibus astris, percepta, in proprias sedes; with Housman's note ad loc. Add Ovid Fast. iii. 675-6 nunc mihi, cur cantent, superest, obscena puellae, dicere; Ibis 246 fata canet uates qui tua, dixit, erit; Mct. xiii. 784 sumptaque harundinibus compacta est fistula centum (where est belongs to sumptaque): Hor. S.i. 1. 33 paruola, nam exemplo est magni, formica, laboris ... English poetry is sometimes capable of equally violent transpositions, as,e.g., in Marvell's Horatian Ode 11. 7-8 'Removing from the wall, The corslet, of the hall'-lines which editors, not perceiving the pseudo-classicism, have conspired to punctuate in such a way as to make nonsense of them.

I can find no other way of interpreting an unaltered text, unless we are to suppose (and I do not see how we can suppose) that singula and bina are not antithetical here ; unless we are to suppose, that is, that singula $=$ each one, each of the twelve signs, and that propria sorte distinguishes the influence of each sign in isolation from its influence when in conjunction with some other sign or signs; that propria sorte is opposed not to binis but to consensu et foedere (271) whether of trigona or quadrata, \&c.
-159-96. bina signa. Of these there are three classes: (1) signa paria, $\xi u ́ \zeta u \gamma a, ~ G e m i n i, ~ P i s c e s, ~ 161-8 ; ~(2) ~ s i g n a ~ b i f o r m i a, ~ \delta ı ф u \eta, ~, ~$ Capricorn, Sagittarius, 169-73; (3) signa ratione duplicia, סın $\lambda \hat{a}$, Gemini, Sagittarius, Pisces, Virgo, 174-95.

159-60. geminata per socium together, as Germ. Arat. 548 per Chelas geminato lumine fulgens.
161. quis sunt collegia: quibus sunt collegia duorum corporum: tanquan Gemini sint collegae inter se et Pisces, Scaliger.

161-2. ualent fatis ambiguis ad meritum noxamque: fatis is abl. of the sphere within which; v. 28 ualeant ortu.
162. per sidera: below 488 uidet atque audit per sidera Pisces; where per sidera clearly means 'across the intervening signs'. So perhaps here too: 'behold, gazing across the signs between, the Fishes' ; the 'signs between' will be those between Aries and Pisces, Aries being always the natural starting-point for a survey of the Zodiac. Yet at 922, iv. 443 per sidera $=$ inter sidera, or nearly so, as Verg. Georg. i. 238; and it may mean so here. At iv. 238 per sidera is different-'in sidereal form'.

164-5. his =Geminis, illis $=$ Piscibus, while haec in $167=$ et Pisces et Gemini.

165-6. alia sunt respicientia se, ut Gemini, alia auersantia, Scaliger.
165. in contraria uersis : alter enim $\beta$ ópetos, alter עótıos, Scaliger.
166. par numerus: sc. Piscium.
167. toto gaudentia censu: explained by what follows; both (1) unimpaired in form, (2) self-sufficient; they are not $\delta \iota \phi \nu \eta{ }_{\eta}$.

169-70. quaedam quod: the construction is quod dolent et mirantur quaedam (signa) quae sunt parte recisa et membris ex diuerso corpore commissis.
amissumue in 169 is a necessary correction of admissumque, being paralleled with parte recisa. Yet Jacob, followed by Breiter, retains admissumque, placing after it a semi-colon. He then explains the clause dolent quaedam quod as = quaedam dolent quod parte recisa sunt, \&c.-of which Ellis rightly says mire errauit Iacobus. Breiter offers no explanation.
170. commissis: at Germ. Arat. 414-15 'sunt etiam flammis commissa immania membra Centauri' Burmann conjectured stant . . . commissi (perhaps 'sunt etiam humanis commissa', \&c.).
173-4. alta in 173 is, I believe, corrupt; and in 174 I have altered duplane to duplicine (as 188). But I see no convincing reason for obelising the two lines. quoque in 173 need present no difficulty; 'this distinction as well as the distinction between singula and bina, humana and ferina, \&c.' The two lines sum up (and such summingup couplets are in Manilius' manner) the nature of the distinction illustrated by the preceding six lines. A constellation, like Pisces, consisting of two paria corpora is to be carefully distinguished from a constellation, such as Sagittarius, consisting of one corpus diuersis membris. §ú乌vya are one thing, $\delta \iota \phi u \eta$ another.

175 sqq. Erigone: all the tropic signs save Libra are preceded by a binum signum; Cancer by Gemini, Capricorn by Sagittarius, Aries by Pisces. Accordingly, lest any tropic sign should not be preceded by a binum signum, Virgo, who precedes Libra, binis numeratur in astris, is counted as a binum signum. She is ratione duplex (176), 'double according to reason'-for the pure reason insists on this kind of symmetry.
176. (1) The text of the MSS. nec facie, ratio duplex cannot be sound, though Ellis defends it; for ratio duplex cannot be explained by the following words: since desinit . . . incipit constitute together only one ratio, viz. ratio situs; (2) for the same reason hoc faciet ratio duplex (Regiomontanus) is wrong; (3) Bentley's et facie et ratione duplex is more obviously wrong than anything else. If Virgo is double both facie and ratione then she is in just the same case as Sagittarius, which Manilius clearly means to say that she is not. It is true, as Bentley points out, that at 661 Manilius has duplicemque in Virgine formam ; and it is true that Erigone is winged, and might therefore, strictly speaking, come under the class of $\delta \iota \phi v \eta$. But (I) Virgo retains her distinctive humanity in a way in which e.g. Sagittarius does not. The wings, so to speak, hardly matter. We do not, to take an analogy, think of Cupid (despite Browning's 'Lyric Love half-angel and halfbird '), or of Mercury, as half-bird ; (2) at 660 sqq. where Manilius speaks of duplicem in Virgine formam he also reckons Pisces and Gemini among duplici conexa figura, which is exactly what in our present passage we are told they are not. The Centaur also is said to
have duo corpora. It would seem that in 660 sqq. duplici conexd figura...duplicem formam ... duo corpora are used loosely as rough synonyms for bina ( $-u \mathrm{~m}$ ) signa ( $-u \mathrm{um}$ ) merely.

On the whole we may conclude that Manilius habitually regarded Virgo, despite the wings, as simplex = nec facie (forma) duplex essentially, and as only duplex by accident-the accident of position. This is, I feel sure, a truer view than that of Ellis, who holds that nec facie, \&c., is equivalent merely to ' non tam facie quam ex duplici tempore cui praeest aestatis et autumni', 'double not so much by her form as by her position'. For why (see above) should ratio count for more in the case of Virgo than in that of Sagittarius? [See, however, Boll Sphaera, p. 513, Abū Ma'sarar, ch. vi with note 5.]

Bouché-Leclercq rightly points out (p. 151) that Manilius has throughout this passage embarrassed himself with the conflicting claims of geometry and mythology. Ratio demands that the signs preceding the tropic signs should be duplicia, since by their position duplices retinent in corpora uires. And this demand happens to be satisfied mythologically in the case of all of them save Virgo. But Bouché-Leclercq is clearly in error when he says that with 'un peu plus de savoir-faire' Manilius might have got rid of the difficulty as to Virgo by supposing that constellation 'double' as being composed of Virgo and Spica. Virgo and Spica could not be regarded as, in any sort, paria corpora, as e.g. the twin fishes are; nor again as a signumb סitués, since the Spica is obviously not a part of Virgo's corpues, as the horse is a part of the corpucs of Sagittarius.

178-80. idcirco . . . quod: together.
182. ex Geminis: Bitterauf Observationes, pp. 20-1, points out that Manilius is never consistent in his usage of ex, $e$; thus we have ii. 395 ex partibus; iv. 593 e partibus; ii. 484 ex signis; i. 285 e solido. The fact, therefore, that at iv. 152 we have e geminis cannot be used here (though Bitterauf uses it) as an argument against Ellis' ex, which explains at once the $e$ (an easy emendation) of $M$ and the et of $G L$. Similarly at 370 we should read probably ex totidem (cf. iv. 91 ex tecto) despite iii. 375 e toto.
182. Cf. Lucr. vi. 359 tempora . . . ueris florentia.
184. nudus: so Ovid Met. ii. 28 nuda aestas.
186. par est primae sors ultima parti: gives the reason why sentit uterque calorem ( I 84 ) ; the end of spring, sors ultima, is as hof, par est, as the early part of summer, primae parti.
parti : non uideo cur parti deneges Manilio, sorti potius scribas: nihil interest utrum eligas: uocabula uariauit, non rem, Ellis; and it is true that Manilius uses pars and sors indifferently; see Book III passim, e.g. 385 sqq. But sorti, though I have not ventured to print it, seems to me more elegant and Manilian here than parti.

187-8. Arquitenens: for the spelling cf. Verg. Aen. iii. 75 ; Naevius Fragm. 32, 43 Baehr.
sub ipso promittit: Capricornum post se oriturum promittit, Bentley, and so Pingré. For sub ipso = post se, Bentley compares Verg. Aen. v. 323-4 quo deinde subipso ecce uolat. But to be running ( $=$ uolat) right up under some one is intelligible; to promise some one right up under oneself seems to me not so. 'Verheisst in seinem Laufe den Winter,' Breiter, with what one might think intentional obscurity. 'Under his own form he gives the forecast of Capricorn,' Ellis (because, I suppose, both he and Capricorn are signa סıфvī) ; but Manilius is not here concerned with the fact that Capricorn
is a double sign but with the fact that he is a tropic sign. (The sense which Ellis gives to sub is, of course, distinctively Manilian.) I fancy that sub ipso promittit means little more than in se promittit, ' on the occasion of his own appearance,' the prep. being used as at v .23 I nec tales mirere artes sub sidere tali.
188. fertur: 'est représenté,' Pingré, giving a false point. No, Virgo 'est représentée' is said to be a double sign, Capricorn is one. fertur = 'moves'-of the фopá of the ò̀pavós, as Catullus lxii. 20 Hespere, qui caelo fertur crudelior ignis? Cic. Arat. Fr. 3 (Baehrens); Germ. 449, 578, \&c.
190. hominis: oris codd.; and oris at 172 all save M. It seems to me nothing but perversity in Breiter that he reads hominis there and refuses to do so here (hominis $=\overline{025}=$ oris). Retaining oris he explains the construction as $=$ molles artus, molliorem materiam oris!
fera tergo, \&c. 'Sa croupe hérissée de poils,' Pingré, incorrectly, for this would require tergore; tergum, despite Seneca Thy. 228, and some lexicons, never means 'hair'. artus ferini quos habet a tergo, Du Fay, inexactly. tergo goes with excipiunt.
191. tnunciamquet in tempora signum. The true reading is probably past recovery. mitturtque (most edd.) I do not understand. 'Annonce le commencement (de l'hiver),' Pingré; apparently after Scaliger, who takes signum mittere as though of the praetor who signum mittendi currus dat. Scaliger's note is not intelligible. Du Fay pronounces it nugae, but offers nugae himself when he renders promouent illud signum in duo diuersa tempora. No other interpretations are offered in any book known to me.

Breiter's nutatque is at least an improvement on mittuntque; but nutare is an odd expression of Sagittarius. Jacob's mutantque means nothing; fera terga Sagittari mutant signum ( $=$ Sagittarium) in tempora! The corruption probably extends beyond nunciamque. in tempora looks as though it had come from the line following.
193. dicant: 'ont rapport à,' Pingré, evasively; 'beanspruchen für sich,' Breiter, as though dǐco was uindico. dǐco is a favourite word of Manilius, e. g. i. 600 diuisosque semel fines sortemque dicatam; ii. 435 et quae (signa) cuique deo rerum natura dicauit; iii. 453 Tauri signo pars sexta dicanda; iv. 855 spatium quod cuique dicatur; v. 363-4 caeloque dicatum alituum omne genus. (At ii. 887 the text is uncertain.) In all these passages dizco is i. q. tribuo, 'assign'; just as at Verg. Aen. i. 73 propriamque dicabo. But to whom, or what, do the duo Pisces here assign bina tempora?

In the way of emendation nothing better has been proposed than the dabunt of Regiomont., ferunt of Dulcinius (Scal. ${ }^{1}$, Du Fay):

If the text is sound, dicant must, I think, be an archaism for indicant, and so I have, doubtfully, rendered it in my translation. Nonius 287 explains dicare as = nuntiare. Lucilius, Book XXX, has Fama tuam pugnam dicasset ; and the MSS. of Catullus at lxiv. 227 give dicet, where, if sound, it can only mean 'declare'; uide Ellis ad loc. Against this interpretation must be set, of course, the constant use in Manilius of dico =tribuo.
hiemem hic claudit, Bentley, too hastily. Cf. L. \& S. s. v. alter.
194. aequoreis.. astris $=$ Piscibus. reuolans, merely regressus.
195. Egregia Scaligeri emendatio, Bentley, truly; and the same may be said of 196 .
196. utraque sors umoris: that is, et hiberni imbres et uerni rores (195). It perceptibly deepens the pain of life when one finds a man like Stoeber setting up against Scaliger's certain correction such a piece of tomfoolery as 'ultra quod sursum oris, ä้עш той бтómatos'.
fluitantia signa: aequorea astra (194) = Pisces.
197-202. Signa auersa: i. e. signa quae a posterioribus partibus surgunt; viz. Taurus, Gemini, Cancer.
201. auersa: so Bullialdus for MSS. aduersa; see on 153. Bentley defends aduersa: 'Taurus quidem auersus surgit: sed ob iul ipsum sol aduersum eum et a fronte incurrit', which is true enough in itself, and gives $a$ reason for the sun's delay. But so does auersa, and one more to the point. The signs through which the sun passes in the aestiui menses (Aries, Taurus, Gemini, Cancer, Leo, Virgo) are three of them auersa, three of them recta; hence the sun in these months encounters a caelum in which there is a quasi seditio (198), and hence he is hampered in his march. The aestiza signa are a 'wrangling lot', some auersa, some recta, and hence the sun's difficulties.

Breiter rightly accepts auersa in his note (though he prints aduersa in his text); but he has not understood the passage, and does not see that the point of auersa lies in the seditio of auersa and recta signa. 'The clunes of Taurus, the feet of Gemini, the testa of Cancer are turned westward, not eastward. Dadurch soll ihr Aufgang länger dauern.' Breiter incidentally does Du Fay an injustice by misquoting him. Du Fay retains aduersa and renders it, not by reluctantia (as Breiter says, rightly pointing out the fatuity of this), but by reluctantia ceteris aliis (ceteris aestiuis?), which is perfectly good sense and expresses Manilius' meaning-though aduersa cannot yield this. (aestiua, Bonincontrius in his Commentary, but in his text aduersa.)

In passing through the summer signs the sun occupies 186 days 10 hours, as against 178 days 2 hours in the winter months. The astronomical cause lies of course in the sun; Manilius poetically puts the blame on the signs. The phenomenon to which Manilius here alludes was first noticed by Hipparchus, who, by the observation of it, was led to the important discovery of the eccentricity of the sun's orbit.
202. tardis mensibus: Verg. Georg. i. 32. Cf. tardasque uias (Phoebi), of the summer months, Nemes. Cyn. 165.

203-23. Signa nocturna et diurna. nocturna are not those that rise by night, diurna those that rise by day (for all the signs rise at one time by day, at another by night). nocturna and diurna are determined by certain partes sacratae which nature has assigned to the signa-by a mystical law of number and position. The diurna are alternate pairs of signs beginning from Taurus and Gemini (viz. Taurus-Gemini, Libra-Virgo, Capricorn-Aquarius. The nocturna are alternate pairs beginning with Cancer and Leo, i. e. the pairs lying between the diurnal pairs (viz. Cancer-Leo, Scorpion-Sagittarius, Pisces-Aries).

Some hold that the diurna are Aries and the five following signs, the nocturna Libra and the five following signs. Others identify diurna with mascula, nocturna with feminea.

Breiter's diagrams are rather a hindrance than a help. Du Fay's distich gives Manilius' scheme at a glance.

Of the three systems of which he here speaks, Manilius rejects the simplest and most natural, namely the last (22I-2). His rejection of it is the more remarkable in that it seems to be the scheme of Posidonius ; cf. Theo. Smyrn. Hiller, p. 43, cited by Bouché-Leclercq,

 he omits to note the opposition here between Manilius and his 'source'. The scheme which Manilius himself adopts is apparently determined for him by the doctrine of triangular affinities-which the reader has here to presuppose, since it is not adumbrated until 270 sqq. The scheme incidentally involves Manilius in the difficulty that each pair is composed of different sexes, which are eo ipso antipathetic (see 385-90). The scheme mentioned at 218-20 is Alexandrian. 'Les Alexandrins qui firent parler Nechepso et Petosiris purent invoquer la vieille tradition égyptienne, qui adjugeait une moitié du ciel aux heures du jour et à leurs divinités protectrices, l'autre moitié aux heures et divinités de la nuit,' Bouché-Leclercq, pp. 155-6. For the inconveniences of this scheme, and for the reformed scheme of Ptolemy see Bouché-Leclercq, pp. 156-7.
205. peragentia sortem: modelled on such phrases as peragere uices (Ovid Met. xv. 238), peragere noctem (noctem, the Cusanus here) Ovid Am. I. ii. 3. Cf. Ovid Met. xiii. 618 sol duodena peregit signa.
206. nam : 'for in that case.'

- 211. Sagittari: Bentley noted that Manilius never, save at ii. 740 in the Greek word dodecatemorii, employs the uncontracted form -ii for the genitive of nouns in -ius, -ium; see 232, 280, 484, 505, 560 , 569. Bentley took this as an indication that Manilius was not postAugustan. But the same reasoning would conduct us to the view that Persius was not post-Augustan, for he also eschews the genitive in $-i i$. See Cramer Man. El., pp. 5-6, n. 1 (and Lachm. Lucr., p. 325). Cf. also on 740.
rabidique: 'rapidique durch $L$ and $M$ empfohlen,' Breiter; in which case $L$ and $M$ will serve to 'empfehlen' anything. ita semper peccutur pro rabidi, Scaliger, truly, at 550.

216. nec numero dissortia nec uice sedis: non numero dissortia because, like the diurna, they are pairs; non uice sedis dissortia because, like the diurna, they are alternate pairs. This seems quite clear, though Bentley professes himself unable to understand either mumero or wice sedis.

I have accepted Ellis' dissortia for MSS. consortia. The only alternative would be to receive Breiter's nunc . . . nunc for nec . . . nec, retaining consortia. Breiter's previous uel . . . uel is clearly inferior.
217. interiecta locis totidem : locis totidem together ; 'fitted into as many gaps,' i.e. fitted into the six places (or three double-places) left vacant by the diurna.
219. astris: castra illa frustra tuetur Scaliger, Bentley, truly.
220. Chelis: so Bentley for libris of $G L$ ( $=\Omega$ is); $M$ has libra; 'damit ist Bentley's Chelis beseitigt,' says Breiter. Far from it ; and in reviewing Breiter's text I praised the scholarly sense which led him to retain Chelis despite $M$; but I now find that he retained it not on his own judgement but on that of the printer. libra is no doubt merely an intelligent emendation of libris. Given libris one can explain libra; given libra one cannot explain libris.
222. in noctem tutis together (noctem =libidinem): so Jacob; but the text is pretty certainly corrupt.

223-33. Signa (1) Marina: Cancer, Pisces ; (2) Terrena: Aries, Taurus, Scorpion, Leo ; (3) Ambigua: Capricorn, Aquarius.
224. scopulosus: Bentley's populosus (a late word at best ; add to L. \& S., Nemesianus Cyn. 136 populosos pascere fetus; Ammian.

Marc. xvi. 12. 6 populosis gentibus) will never do. On the other hand scopulosus does not mean (1) saxutilis (Pliny ix. 51 ); qui saxosis locis delectatur, Du Fay; so Stoeber, ingeniously, comparing Pliny N. H. xv .7 frutices saxosi. But cf. Plin. N. H. ix. 15. 51 (locustae) uiuunt petrosis locis, cancri mollibus; nor (2) saxosus in the sense of durata cute tutus, as Jacob, Breiter. Breiter, of course, compares Val. Fl. ii. 518 scopulosaque terga. He might have added Stat. Ach. i. 56 scopulosaque cete; but in neither passage does scopulosus mean durata cute tutus. In both passages it means, as here, 'towering' or 'projecting like a rock'. In fact, scopulosus Cancer is more or less i.q. fastigia Cancri in 5 10, sublimem Cancrum in 512. Cf. saxei dentes, 'big as rocks' (like molares dentes), Apul. Met. xi. 12. Du Fay's rendering has this much truth in it that scopulosus was no doubt suggested to Manilius as an alternative to sublimis by the fact that Cancer is marinum signum.

It is urged by commentators that scopulosus can mean only 'full of scopuli'. And it is true that this gives the usual force of the termination -osus. Yet in Vergil's ramosa cornua (Ecl. vii. 30 ), ramosus does not mean 'full of rami', but 'like rami'; just as lignosus means 'like lignum', cadauerosus 'like a cadauer', pumicosus 'like pumex', hircosus 'like a hircus'. Compare also, perhaps, monstr(u)osus, portentosus.

Neither Avianus Fab. iii. 1-2 cancer | hispida saxosis terga relisit aquis, nor id. xx. 7-8 (of a small fish) uix me saxosis genetrix effeta sub antris fudit are in point, though I at one time thought that they might support Du Fay's interpretation.
-226. censentur: like census (see on 69), a favourite Manilian word: below, 293 (where Scaliger is in error) dextris censentur signa priora, 652 cognata quadratis corpora censentur signis, 666 uno censetur Aquarius astro, 677 non lege quadrati censentur. Construction with sub iv. 246, 325. Cf. Juv. viii. I-2 longo sanguine censeri (vide Mayor ad loc.) ; c. laude tuorum (ib. 74). Somewhat differently Mart. Cap. longitudine profunditateque cens.

At v. 217 'uno censentur lumine cuncta' should, I think, be restored for ceu sunt in.
229. dumosis : propter aculeum, Bonincontrius; but cf. dumosis ... aruis Verg. Georg. ii. 180.
231-2. These lines stood at the foot of a page in the archetype: see Introduction, p. xxiv; 232 has usually been regarded as spurious; but, oddly enough, 231 seems to have escaped suspicion (though attempts have been made to emend it ). Yet ( I ) the datives terrae... undis involve an impossible Latin:-v. 419, which Breiter cites as a parallel, is no parallel at all, since terrae, \&c., there is governed by creatur; (2) the line seems clumsily modelled on iv. 795 (Capricorn) ambiguum sidus terraeque marisque; cf., though different, Aetna 594 terrae dubiusque marisque (Aquarius here, indeed, may possibly, as Scaliger thought, be a mere blunder for et aequoris [aequoris undis = Lucr. v. 374 ; Ovid Met. i. 341 ; Am. ii. 11. I]: sed sic quoque delendus uersus) ; (3) 230-3 stand, by the removal of 231-2, in their true connexion-the connexion which the earlier editors strove to effect by transposing 233 with 231-2.

About 232 there can be little doubt. (1) the pars marina of Aquarius is necessarily marina, and therefore not ambigua; (2) Aquarius ... Aquari is not tolerable, and no satisfactory emendation has been proposed. Perhaps Bentley's transposition to a place after
iv. 489-with pars est prima nocens-is right. Jacob's pars maris, urna nitens is not without merit (pars mar' urna became easily pars marina, and -que was inserted to stop a metrical gap). [pars maris $=$ Ovid Met. i. 315.]

Bentley alters fundentis to umentis, but cf. 464. Manilius is always troubled for synonyms for Aquarius. So, too, other poets. iuuenis . . gerentis aquam, Ovid Fast. i. 652 ; puer Idaeus, ib. ii. 145 ; Portitor urceoli, Anth. Lat. Riese ii. 677 ; urnifer, ib. ii. 76I ; ephebus, Avienus Arat. 550.

If $23 \mathrm{I}-2$ are rejected, as I believe they should be, it is clear that after 233 a line (or two lines) has become lost in which Capricorn and Aquarius were mentioned.
233. aequali lege remixta. So Scaliger, in his first edition, for atque illi degere (de genere M) mixta-an emendation which he subsequently abandoned for aequali foedere. Of other emendations atque illis terrea mixta (Regiom.) is clumsy, aequali sidere mixta (Du Fay) seems to me unintelligible.

## aequali lege recurs at III.

[atque illi digere in ista, Boninc. $=$ digere ergo illi Aquario humida!]
234-43. Signa. (1) Fecunda: Cancer, Scorpion, Fishes; (2) Sterilia: Virgo, Leo, Aquarius; (3) Communia: Capricorn, Centaur, Aries, Libra, Gemini, Taurus.
236. proprie : 'in hervorragender Weise,' Breiter, quite wrongly, though Pingré, before him, renders correctly, and Du Fay more or less so : 'as their proprium.'
 Leo see Plin. N. H. viii. 45.
239. nec capit... effundit . . ortus: quippe qui puer fingatur, Du Fay. But the matter does not end there. Insunt uersui huic Veneris monumenta nefandae, quam cum Catamito exercere Iupiter fingitur: nec patitur noster pudor ut pluribus haec explicemus, Huet. Aquarius was very commonly identified with Ganymede: as Ovid Fast. ii. 145 puer Idaeus; Eratosth. Reliq. pp. 144-5.
ortus: semina. With the whole expression cf. Ovid Fast. vi. 293-4 semina nulla remittit nec capit (of Vesta); ibid. iv. 771 conceptaque semina coniunx reddat.
242. communis: i. q. inter utrumque manens (240), where Du Fay explains by partim fecunda partim sterilia, which is sheer nonsense, and when Breiter repeats it in 'teils fruchtbar teils unfruchtbar,' it still remains sheer nonsense. All animals are partim fecunda, partim sterilia. By communia signa Manilius means those signs which, in the matter of propagation, strike the happy mean, are 'normal'.
243. pari . . . recenset: ' $z a ̈ h l t ~ z u ~ s e i n e s g l e i c h e n, ' ~ B r e i t e r . ~$

244-55. Four classes, each containing three signs: (1) Currentia : Leo, Sagittarius, Aries; (2) Stantia: Virgo, Gemini, Aquarius; (3) Sedentia: Taurus, Libra, Capricorn; (4) Iacentia: Cancer, Scorpion, Pisces.

On the whole passage see Bouché-Leclercq, pp. 151-2 ' Manilius confond les signa recta, debout sur le cercle du Zodiaque, et les recta qui se lèvent debout sur l'horizon. De même il confond les signes qui marchent ou courent, comme le Lion et le Sagittaire, avec les signes "rapides" qui se lèvent rapidement sur l'horizon, comme le Bélier.'
244. commenta: i. 84 ; here almost 'purposes'. locasse : so Bentley rightly for uocasse [locauit and uocauit are similarly confused at Lucret.
v. 12] ; the word, as = ponere, is constant in Manilius, e. g. in this book 459, 653, 722, 732, 736, 744.
246. Aries: classed among currentia, despite the pictorial representations of him, since longe maxima currens orbe suo spatia, Germ. 224. (Bouché-Leclercq, p. 152 n.)
in cornua tortus: ipsa quidem cornua torta sunt: at totus Aries nec tortus est nec esse dicitur, Bentley, who writes toruus (found already in Ven.), comparing Sil. Ital. xv. 62-3 uerti . . . nunc auis in formam nunc torui in cornua tauri, where he says, perhaps truly, that the construction is tauri torui in cornua (cf. the Vergilian irasci in cornua). Yet tortus may very well be sound; it is more than the horns of Aries that is tortus, as appears from iv. 506 et ceruice prior flexa quam cornibus exit. See e. g. the pretty illustration in Du Fay, p. 33, or Bouché-Leclercq, p. 131. [At Verg. Aen. vi. 571 the MSS. vary between tortosque and toruosque.]

For in cornua compare, perhaps, besides irasci in cornua (Verg. Georg.iii. 232; Aen. xii. 104), from Manilius the strange expression i. 341 stellatus in alas; and again i. 355 in poenas signata suas ; iv. 509 in cornua fertur is not in point, nor at iii. 631 pacatas languet in undas.
251. Libra. Clearly Libra is here represented as a person, holding a Balance (as Firmicus viii. 3). But what person? Palamedes (with whom Libra is elsewhere sometimes identified) is hardly in point here. The words emerito . . . orbe laborum suggest the true answer. The labores can scarcely be, as Breiter says, the labor librandi; for how could the labor librandi be a round of labours, orbis laborum? sub emerito ... orbe laborum can only mean 'on the occasion of (as 187 , q. v.) the completion of his round of labours'. [The orbis laborum is said to be 'paid off', 'discharged '-by a not unnatural transference ; strictly it is Libra that is 'paid off'.] Now the only person who can possibly be conceived as having thus completed a round of duties is the Sun; and in the Augustan and post-Augustan poets emeritus is frequently so used of the Sun, in respect of the completion whether of his diurnal or of his annual orbis; e. g. Ovid Fast. iii. 43 quominus emeritis exiret cursibus annus ; ib. iv. 688 emeritis . . . Phoebus equis; Stat. Theb. i. 336 (Titanis) per emeriti surgens confinia Phoebi; Seneca Ag. 908 emerito die; Thyest. 797 emeritos cursus; Epigr. iv. P.L.M. IV. p. 56 emeritam . . facem. The Sun, then, when he comes to Libra, is said to have finished off his 'round of toils'. He has entered the winter signs; he has passed into the night ( 220 sex a Chelis nocturna uideri); from the point of view of his annual course he has set, and is thus as appropriately called emeritus as at his daily setting.
orbe laborum perhaps contains a suggestion of the identification of Heracles with the Sun found in Nonnus xl. 367-410; see BouchéLeclercq, p. 577. I.
252. Since sitting is the most natural attitude for shivering.
contractus, 'huddled up'; Hor. Ep. i. 7. II contractusque leget; Phaedrus. iv. (24) 25.20 mori contractam frigore; Verg. Georg. iv. 259 contracto frigore pigrae is perhaps different.
253. quaeue, contra MSS. I have received Breiter's conjecture, based on the lemmata to 247-9. But there is a good deal to be said, palaeographically, for Bentley's strata. Strata before iacent became stra, and this was read as $\overline{c t r a}=$ contra. It seems to me simpler, however, to suppose contra to be a mere dittography of contra(ctus) in 252. Stoeber defends the MSS. 'Who,' he asks plaintively, 'could be so illiberalis as to refuse a false quantity to a poet who everywhere
cares more for matter than for metre ?' Soo, too, Bitterauf. But Manilius is an extremely careful metrist. He was as little likely to follow Ennius apud Varr. L. L. vii. 12 (contra tueri) in shortening the last syllable of contra as he was to anticipate Ausonius De Rat. Puerperii Maturi 40 in shortening the second syllable of trigonum. Servius' contră carinantes (Aen. viii. 361), also from Ennius, is doubtful. Lucilius apud Nonium, p. 153.17 has, perhaps in the beginning of a hexameter, contra uenis. At Plautus Pseud. 156 we should, I think, read adsistite omnes meque contra quae loquor aduortite animum; see Lindsay's App. Crit. ad loc. (contră in Carm. Epigr. 1254 Bücheler is from a period after Hadrian). Analogy will help us but little. frustră, for example, is frequent in Plautus. So Auson. Tetrastich. 3. 3. Nearer to our purpose is Catullus lxvi. 66 Callisto iuxtă Lycaoniam, where, however, Ellis rightly inclines to Parthenius' iuncta Lycaoniae. (Friedrich's argument, however, that iuxta in Catullus could not be used as a preposition is as worthless as the inverse objection employed at Plaut. Pseud. 156 (above) that contra is not used in Plautus as an adverb.)
254. incumbens terrae quae est sub plano eius pectore, Bentley. plano sub pectore $=$ Ovid $A m$. i. 5. 21.
255. in latus obliqui: obuersi inter se, Du Fay, wrongly. 'Swimming' is all that this phrase means. Stat. Theb. vi. 544 has in latus ire manu for 'to swim'; and I take the opportunity of explaining here a passage of Ovid's Metamorphoses iii. 186-8--

> quae quanquam comitum turba est stipata suarum, in latus obliquum tamen adstitit, oraque retro flexit
-of Diana at the bath, when Actaeon came upon her. She did not stand slantzuise, as commentators make her do. She did the natural thing under the circumstances. She threw herself into a swimming posture, immersing herself, and, as Ovid goes on to say, splashing water into Actaeon's face.

256-64. Signa Debilia: Scorpion, Taurus, Cancer, Sagittarius.
258. The Scorpion and its claws (Chelae) occupy the space of two signs. The Scorpion is debile in so far as its Claws are lost in Libra. (From the first century onward astronomical writers came more and more to use 'Libra' for 'Chelae'. It has been supposed that 'Libra' (Zuyós) was introduced first by Hipparchus; see BouchéLeclercq, p. 141.) Verg. Georg. i. 34-5 tibi iam bracchia contrahit ardens Scorpius et caeli iusta plus parte reliquit; Germ. Arat. 448-9 (maiorem) Scorpius hinc duplex quam cetera possidet orbem sidera, per Chelas geminato lumine fulgens. Scorpion may thus be regarded indifferently as either duplex (duplus) or debilis.

259-60. lumina Cancro desunt: cf. ii. 494-5 Cancer and Capricorn in semet uertunt oculos. Cancer's blindness is thus due to the geometrical doctrine of àvtiokıa (expounded at 466 sqq.).
261. A man, to parody Solon's saying, may best bear ill-fortune by seeing the constellations in a worse condition. The same idea occurs in a somewhat different form in Pliny N. H. ii. 7. 26 imperfectae uero in homine naturae praecipua solatia, ne deum quidem posse omnia. Bouché-Leclercq compares, also from Pliny, (of eclipses) quis enim cernens non suae necessitati mortales genitos ignoscat (N. H. ii. § 55). Similar is Seneca Prov. v. 8. Add Rutil. Nam. 12I-2 aduersis solemne tuis sperare secunda: exemplo caeli ditia damna subis. For
the form of the line cf. Prop. iv. 7. 69 sic mortis lacrimis uitae sanamus amores.
-265-9. Signa (1) Verna: Aries, Taurus, Gemini; (2) Aestiua: Cancer, Leo, Virgo; (3) Autumnalia: Libra, Scorpion, Sagittarius; (4) Hiberna: Capricorn, Aquarius, Pisces.
268. scribuntur in: i. q. censentur and abl., assignantur. fortasse tribuuntur, says Scaliger ; but see 459 in Geminos (so Bentley, rightly) aequali bracchia sorte scribuntur.
terna : (terrae MSS.) : not Bentley's correction (as Ellis, Breiter), for it appears already in Du Fay. (Similarly at 295 ternaque dett., Regiom., terraque codd.) Jacob retains terrae as dat. commodi. Ellis joins terrae with scribuntur.
269. autumnis: adjective; autumni, Housman, forgetting 425 autumno tempore; Columella xi. 3.38 autumno semine. Cf. Gronovius Observationes ii. 5, p. 109.
270-432. In 150-269 Manilius has been concerned with the Zodiacal signs as individual constellations. He now passes to their combinations -consensus, foedera (271). These combinations are arranged on geometrical principles. The first principle is the triangular one (270-87, 297-375), the second the quadrangular (287-96, 297-357, the third the hexagonal (358-84), the fourth the diametric (391-432).

The 'schematism' of the Zodiacal signs, sometimes called the theory of 'aspects', was the most elaborate achievement of Greek astrology (neither Egyptian nor Chaldean remains suggest a nonGreek origin for it), and the basis of all astrological science. The name 'aspects' ( ${ }^{\circ} \psi$ ets, aspectus), which is often substituted for $\sigma \chi \eta$ 自 $\mu a r a$, is popular rather than scientific, illustrating the constant tendency to 'humanise' astrology. Signs communicating by the line of triangle, quadrangle, \&c., are said to behold one another. See Censorinus D. N. viii. 3-13 (who uses conspectus).
270. nec satis est . . . noscere: the phrase recurs at iii. 581, iv. 409. For the infinitive after the adverb satis cf. ii. 331, 751, 966 ; so after parum, i. 16; after nimis, iii. 34, iv. 439 (Cramer Der Infinitiv bei M, p. 68).
proprias ... formas: 'their configuration as isolated signs'. The propria forma is distinguished from the geometrical $\sigma \times \eta \mu a \tau \iota \sigma \mu{ }^{\prime} s$. Hence Bentley's sortes for formas is unnecessary, and, owing to sorte in 272, unlikely. 155-96, 244-64 all describe (and not merely 256-64, as Ellis, $q . v$.) the propriae formae of the signs.
272. sorte locoque: ' according to what is ordained for them, and to their position in the Zodiacal circle'; or, possibly, their interrelation

-273. circulus extremo signorum ut clauditur orbe: so I have endeavoured to correct the MSS. circulus ut dextro sign. claud. orbe. extremo $=$ extrêo became dextro (owing perhaps to the influence of the lemma in $M$, quae corum dextra aut sinistra), and ut was then transposed metri gratia.
dextro Bentley rightly pronounces impossible ; nor, were it not so, would Stoeber, as he does, defend it. My extremo is palaeographically and, I think, in sense superior to Bentley's fexo. Compare with it iv. 361-2 orbe feruntur extremo; Anth. Lat. Riese ii. 761. 16 Piscibus extremus locus est quem signifer explet.
ut : possibly 'where', as Catull. xi. 3 ; but 'when' may be right.
274. discurrit : the line runs out ; you have not got to draw it ; it
is drawn by nature. The linea is the line of the circulus itself (cf. 338-9), not $a$ line. The line having run its circular course (ut clauditur) ${ }^{3}$ 'runs off into three equal straight lines, and joins itself to three points in the circumference (finibus), which are each the furthest point possible from one another (in uicem extremis)' ; i. e. there is within the circle an equilateral triangle of which the apex falls on the point $u t$ (ubi) clauditur orbis.
276-7. 'And whatever signs it strikes are called triangular because an angle is thrice made (ter cadit) and is assigned to three constellations'; i. e. the three angles formed by the line are distributed among

three signs -' which remain separated from one another by three intervening signs.'
277. in tria partitus: as iii. 384 per duo partitae, echoing perhaps Propert. iv. 9. 10 per tria partitos.
279-80. The first triangle comprises Aries, Leo, Sagittarius.
279. ex paribus spatiis duo signa : two equidistant signs. 280. diuerso ortu, i. e. on opposite sides of him.
281. The second triangle is Virgo, Taurus, Capricorn.

282-3. cetera: the third triangle is Gemini, Aquarius, Libra; the fourth, Cancer, Pisces, Scorpion.

Manilius seems to have in mind (though he starts from a line drawn by nature, cf. on 274) a kind of triangular frame upon a pivot, and by means of this pivot the frame is made to revolve round the Zodiac-the apex of the triangle, which originally rested on the first point of Aries, being shifted round so as to rest on the first point of each of the three succeeding signs in order. The second triangle is arrived at by transferring the apex to the first point of Taurus, the third by moving it to the first of Gemini, the fourth by shifting it to the first point of Cancer. $\lambda o ́ \gamma \varphi{ }^{\omega} \mu^{\prime} \nu$ Manilius is describing the Zodiacal Circle, $\tilde{\epsilon}^{\prime} \rho \gamma \varphi{ }^{\circ} \dot{\epsilon}$ the astrological instruments of his day. That such instruments were objects quite familiar to the ordinary Roman of the time is clear from Prop. iv. 1. 75-6 uates nescius aerata signa mouere pila (see Hertzberg's note) ; cf. Cic. de Rep. i. 14, and the description (quoted in Mai ad loc. p. 43) by Lactantius of Archimedes' sphere (concavo aere similitudinem mundi ac figuram potuit machinari). For some account of astrological instruments in antiquity generally cf. Martin in Daremberg et Saglio's dictionary, vol. i, pp. 486 sqq. Other references, Bouché-Leclercq, 265, n. I. Notable are Ovid Ep. xxv, xviii; Val. Fl. v. 417 ; Claudian li (Kock) ; cf. Grimaldi Catalogue of Zodiacs and Planispheres, London, 1904.
283. per totidem sortes distant quae: separated by the same number of degrees; i. e. by the number of degrees equal to three signs ( 278 ternis signis).

The MSS. offer per totidem tortis desunt (dest M) que. Bonincontrius interprets desunt quae as quae non expressimus
 I have received what seems to me on the whole the most likely conjecture. [We should perhaps write sortis.] Bentley, followed by Pingré and Breiter, athetises everything from distant (desunt) to 287 exemplo est. Yet, save that in 284 seu causa has not been satisfactorily corrected, I know of no objection that has been brought against $284-7$ beyond the false one that they make 293 tautologous. There is no tautology. In 284-7 Manilius merely says that it makes a difference whether triangular signs are right or left. (A sign on the right of an allied triangular sign is superior to one which is on the left of the third sign.) Right signs are those quae praecedunt; left those quae subeunt. In 293 he has passed to quadrangular signs, and speaking of Libra as 'left' he adds 'semper enim dextris censentur signa priora,' i.e. the rule priora = dextra holds good always, and not merely for the signs of a triangle. Indeed 293 is in itself a complete confutation of Bentley, for it is meaningless to any reader who has not got 283-7 before him. In addition to this the text receives confirmation from Firmicus II. xxii. 4-6 Dextrum trigonum est quod ab eo signo a quo incipimus retro est, sinistrum uero quod abante (§ $4=$ Man. 284-6) ... sed quod sit quadratum dextrum, quod sinistrum, simili ratione sicut in trigonis diximus inuenies ( $(6=$ Man. 293).
284. tseu causat: $M$ has seu eusa, which points possibly to si censa-' it makes a difference if the signs belong to the class of right signs'; and the words which follow explain what right and left signs are. Housman's scaeuisque is palaeographically poor, nor is the word Manilian. Ellis' ceu causa I do not understand.
285. subeunt : i. q. sequuntur.

287-94. Quadrangular signs.
287. diuisa quaternis partibus, ' divided according to divisions of four each '; as 298, diuisum signis mundum quaternis, the mundus is 'divided according to sets of four signs'. (The 'sets of four' are, of course, not the signs of each square, but the signs on the arc subtended by any side of the square. 'Lorsque Manilius parle de divisions de quatre en quatre signes. . . les deux signes extrêmes y sont toujours compris', Pingré. This is most clearly seen from 298-9.)
289. quorum: refers back, I think, to quae signa, and not, as


Quadratum i
$V \sigma_{0}=\boxed{\sim}$ Quadratum ii Quadratum iii

Scaliger appar ntl , to laterum; the signorum sedes is marked out at the place where the perpendiculars (normalis uirgula) meet to form a right angle.
uirgula: $=$ linea, as $363,392,646 ;$ uirga, 324.
290. haec quadrata: so Bentley for haec ta (haecca L) of MSS., which he ingeniously supposes to have arisen from $\square t a ;$ cf. $220 \bumpeq$ is $=$ chelis, corrupted into libris.

Ellis' Hetta ferit is, I think, (1) overlearned ; (2) as involving us in receiving Capricornus tortus from the codd. dett., unlikely; (3) inapposite, since to raise the question of the relative strength of
triangular and quadrangular association, before explaining adequately what quadrangular association is, carries confusion.

290-5. The first square is Aries, Cancer, Libra, Capricorn; the second, Taurus, Aquarius, Scorpion, Leo; the third, Gemini, Pisces, Sagittarius, Virgo.
291. hinc: so $M$; hunc cett. hinc, in any case, is not due to Bentley, since it is already given by Du Fay.
atq. ipsum a p. a.: cf. Verg. Aen. ix. 754 atque illi partibus aequis.
297-357. The whole of this difficult and prolix passage is, strictly speaking, unnecessary. Manilius has already said that the triangles are equilateral (274), the quadrata squares (289). It follows therefore that such figures as he is speaking of in the present passage are inadmissible, for they could not be equilateral. If you take a line drawn from the first point of Aries to the last of Leo as the first line of your triangle, that triangle cannot have its three sides equal without going outside the circumference of the Zodiac.

Before 297 GM have the lemma De mensura eorum signiliter atque partiliter. The schematism of signs signiliter ( $\zeta \omega \delta \iota a \kappa \omega \bar{s})$ regarded the sign as a unit, as itself a point ; the line passed from sign to sign. This was the popular and 'unscientific' method ( $\zeta \omega \delta \iota a \kappa \eta$ каi коıv̀े каì $\kappa a \theta$ одıки́, каӨ' $\dot{\eta} \nu \pi a ́ v \tau \epsilon s ~ \pi \lambda a \nu \dot{\mu} \mu \in \theta a$, 'Demophilus'). The exacter method was a schematism partiliter ( $\mu \circ \imath \rho \iota \kappa \bar{s}$ ), in which the line passed from a given degree (pars, sors, $\mu$ oipa) in one sign to the corresponding degree in the other. For a third method, aiming at real exactitude, the mensura रpovıкิิs, introduced by Antigonus of Nicaea, see BouchéLeclercq, pp. 178-9.
299. The construction seems to be aut (ut putet) tria (signa) sub quinis signis ornare trigonum. This involves a slight illogicality, since the ut putet refers back to contentus (ita) numerare quadrata, 'content to reckon squares in such a way .. . as to suppose that ... makes a triangle'.
tria sub quinis : tria, the signs at the apices of the triangle; quinis, the signs on the arc subtended by one of the sides; see on 287 ; cf. 313 ternis dirimentibus. tria sub quinis may, therefore, most conveniently be rendered by ' 3 signs separated from each other by 3 signs'.
ornare: formare, Bentley; but the signs which stand at the apices of a triangle may appropriately be said to be its 'ornament'.
300. exigat, 'demand ', and so ' expect'.
302. undique : on each line of your triangle.

302-4. signa . . . signis . . . astra. The repetition is very harsh; but here again, as so often, we must remember that we are dealing with an unrevised poem. Perhaps in 304 trina (tria) for astra (*tra). - 306. loco . . . numeris : geometrically and arithmetically.

- 322. tter trigentat quadrum. There are 360 degrees in the circle. A quarter of these form the side of a square. The number required therefore is 90 ; and the MSS. offer, indeed, 90 , but in a form (ter trigintă) which involves a false quantity (Mueller R. M., p. 341 (1861) ; add Carm. Epigr. Buech. $387^{\text {duodetriyintă quadragintă, 1255-6 }}$ quinquagintă, Auson. Ecl. Rat. Di., Epp. v. 5 nonagintă, and many other examples from the same collection.) Bentley's nongentae (which involves a circle of 3600 degrees) is the rare lapse of a great man. Jacob's conjecture ter quadra (plur.) triginta, which, it is true, 'trifft das richtige' (Breiter, who prints it) has, on other grounds little to recommend it. Postgate, writing ter quadra triginta...
reddat, takes quadra as fem. sing., comparing Moretum 49; Mart. Cap. viii. 823 .

All these emendations, however, leave untouched two difficulties : (1) quadrum (a) means a square; and here has, apparently, to be interpreted as one side, or line, of a square (latus unum, 309); (2) per sidera is left with almost no meaning. Comparing 307-11 I am inclined to suspect that sidera has usurped the place of linea, and that we ought perhaps to write something like triginta quadri partes ter linea reddat.
326. confertur: as 315 conferre.
subeuntis = laeui: I can find no parallel for subiuncti (Regiomontanus) in this sense, though editors print it without comment.
327. transitque refertque: transire is to 'pass over' in the sense of 'leave out', 'omit', as 368 transita signa. transitque refertque accordingly means et omittit et reddit. The line drawn et omittit et reddit duorum signorum in medio numerum. The numerus of the duo signa in medio is of course 60 degrees. The line omits 60 degrees in that the other line (323-5), with which Manilius is contrasting it, gave 120 degrees; and since it omits 60 degrees, and since $120-60=60$, it also gives-refert, reddit- 60 degrees ; and, lest anybody's arithmetic should fail him, Manilius adds in 328 that it 'doubles thirty degrees, and a third (of its just number) is still wanting to it'.

Only Bentley among editors seems to have seen the meaning of the line. Breiter renders transit by 'durchläuft', refertque by 'und giebt sie auch an', in which I see no meaning. Housman reads transique referque, which alters the text without touching the difficulty. Bentley regards in medio as corrupt; but I doubt if it is to be altered. By 'both omits and returns the number of the two signs between its two points' Manilius means merely the number 30. If he had written partes for numerum, then, no doubt, there would have been the contradiction which Bentley finds. No doubt also the sense would have been clearer if the words in medio had been altogether omitted.
330. unius: sc. signi, i. e. 30 degrees.

331-57. The line of a triangle must cover 120 degrees, of a square 90 degrees. The signs of a triangle or square (when either is constructed according to their numerical laws) have affinity with one another-have communi foedera lege (340) ; and those born under these signs feel the influence of these ties. The influence of triangles is, however, greater than that of squares.
331. signis: by drawing your line from sign to sign rather than from a given degree in one sign to the same degree in another; in fact signis is put for the signiliter of later writers, and Bentley's ingenious quinis is hardly necessary.
332. caeli: quaeri Bentley, followed by Housman; and I am not prepared to say that this is not right ; though fidem quaerat in 59 I q. v. is used somewhat differently. If caeli is right it is best to connect it with signa. The phrase fidem caeli has no support from 452, where the true reading is caelo. Stoeber astonishingly interprets fidem as $=$ lineam, comparing Chelarumque fides in iii. 305 (where fides $=$ iustitia; cf. Luc. iv. 58 iustae pondera Librae).

If the text is sound I suppose that numerare fidem quadrati per signa quaterna means'to reckon a triangle reliable if its line covers four signs'.
-333. formam, as at $317=$ figuram .
334. partibus aut trinis : see App. Crit.; editors take the paribus
of MSS. as = paribus lateribus; but I can find no parallel to this use in Manilius. Cf. 310 in tris perducti partes . . . trigoni (where partes; as here partibus, sufficiently implies equal parts).
cum : perhaps $t u$; cf. Lucr. ii. 491 si forte uoles . . . -494 si tu forte uoles; Hor. Od. i. 9. 16 nec dulces amores sperne, puer, neque tu choreas.
335. hic: in the case of the triangle; illic (336) in the case of the square.
poscit quint. part. c. s., 'the number 100 demands in addition its fifth part,' i.e. 20 ; the line of the triangle must cover 120 degrees.
336. With the square ' 100 loses its tenth part', result 90.
337. quiscumque: sub. locis (loca 338), hardly signis, for we are now dealing with schematism $\mu$ о七七ккิs.
iunctus, Regiomontanus rightly (for MSS. cunctis), supported, as against Scaliger's iunctis (which, however, Breiter prefers), by 275 inque uicem extremis iungit se finibus ipsa.

The whole line is merely a periphrasis for the degrees in quadrangular (as the succeeding line for the degrees in triangular) schematism.
339. See on 273. The line that forms the triangle is the line of the circumference of the Zodiacal Circle, which (circulus ut clauditur, 273) in tris aequalis discurrit ductus. When it thus discurrit, it is said to leave by a straight path (recta-i.e. by the path of the triangle) the spreading and devious (circular) path (dispendia uiae) of the circumference. The curve is a dispendium uiae; as against a recta uia it is a waste, a long route. For dispendia thus used of a curve, or circular bend, see Rutil. Nam. 321-2 uix circumuehimur sparsae dispendia rupis, nec sinuosa graui terra (cura MSS.) labore caret.
signata, I suppose, means 'which it has traversed' or trodden. Pingre's rendering suggests that he took it as signis ornata (cf. i. 355 in poenas signata suas). signarit in 338 perhaps makes signata somewhat suspicious. Possibly sinuata (suggested to me by sinuosa in the lines just quoted from Rutilius).

Scaliger calls the line elegantissime dictum. Mirum uero, says Bentley, si id elegantissimum quod omnino sensu cassum est. But neither editor has understood the passage.

342-6. 'And so not every triangular nativity has sympathy with the signs of its triangle; nor do signs which happen to be quadrangular necessarily on that account (continuo) preserve community of interests' -summing up everything from 297 ff.

Between 342 and 345 our MSS. repeat 318-19 (343-4). Breiter's explanation of this is that the parent MS. of our MSS. was a codex containing 25 lines to the page. This, as Breiter must have known from Jacob, is not true ; for the facts see Introduction, pp. xix sqq. Bentley, strangely enough, was the first to see the futility of emending 343-4.
347. consumat: cf. 318 ; the word does not necessarily convey (as it happens to do there) any notion of wrong use. Postgate's consummet seems idle.
349. efficiat : efficiet MSS. ; efficiens Scaliger, ed. I, speciously; but he has not, I think, understood the passage. Like most editors after him (I am not sure about Du Fay, and I find Jacob's efficiet, with a full stop after ambit, unintelligible) he sees in $347-5 \mathrm{I}$ only two alternatives. There are, I think, three. It makes a difference, Manilius says, whether the line (I) has the right number of degrees
(347), or (2) has too few degrees (348), or (3) 'executes now three, now four, bends (forming a triangle or quadrangle), which logic sometimes compels to continue themselves into more signs than are allowed for in the Circle by the number of degrees it contains' (349-51).

350-I. If you draw the first line of, say, your triangle from the first degree of Aries to the last of Leo, you will, in order to construct an equilateral triangle, have to carry your second line to some point outside the Zodiacal Circle ; and so too your third line. You will want, in other words, plura signa than there are.

351. interdum: logically with efficiat-' makes sometimes a triangle or square which logic (geometry) compels us to continue . . $\because$ \& c.
$352-7$. These lines, it has been urged, involve Manilius in a curious illogicality. He is trying to say that the bond between triangular signs is stronger than that between quadrangular signs. If he is trying to say that, how is it in point to say that the uisus of quadrangular signs is further from earth, from us, than that of the signs of triangular schematism ? Surely what matters is not whether the signs see us but whether they see one another.

I am not clear that this objection, urged e. g. by Bouché-Leclercq, p. 174, is valid. That triangular association was the strongest of all schematisms was universally recognized by astrologers; and it is true that the bond between quadrangular signs was usually regarded as weak, and their relation an antipathetic one. But Manilius nowhere gives his adherence to the vulgar view, as it may be called, that quadrangular signs are less closely related to one another than are trian-
gular signs. On the other hand, he is aware of this vulgar view, and in this present passage (and again in 677-82) he seems to be making a concession to it. He does not admit that the force uniting quadrangular signs to one another is a weak one, but he does allow-as an accommodation to that view-that the force is one which only feebly radiates its influence to earth. The union of a quadrangular schematism is strong enough in itself, but the emanations (a ${ }^{2} \pi \rho \rho \rho o a i$ ) which reproduce that union in our human relations do so only in a weak and uncertain fashion. There are limits to the Wirkung in der Ferne.

For the reasons why triangular association was universally regarded as the perfect schematism see Bouché-Leclercq, p. 170.

354. summoto templo: Bentley compares 668 quadrato condita templo; from which it is clear that the templum is"that of the square, not, as Du Fay, of the caelum; suo arcu, Scaliger; der Umfang des Quadrates, Breiter.
summoto, 'far removed.' The meaning may be seen at a glance from the accompanying figure.
357. aeraque infectum : cf. iv. 742-3 astra . . . perfundunt suo subiectas aethere gentes.

358-84. Hexagonal Signs. The first hexagon comprises Aries, Gemini, Leo, Libra, Sagittarius, Aquarius; the second, Taurus, Cancer, Virgo, Scorpion, Capricorn, Pisces. Their position makes their influence weak; but they get some compensating advantage in that the members of each hexagon are all of one sex. Bouché-Leclercq notes that neither Posidonius, Geminus, nor Cicero takes any account of
hexagonal association. Firmicus admits it : hexagona hoc idem sunt quod trigona nisi quod minoris potestatis (ii. 22); Bouché-Leclercq, p. 172.
358. quin dubia: so I have emended dubiaque of $G^{1}$ and duuaque of $M$ (which is the same). (For misunderstanding of quin by the scribes see 19, 187, 197, 223. At i. 40 perhaps quin natura is the true reading ; at iv. 54 perhaps quin etiam posses; at iv. 89 quin nec paupertas. Housman's quin placidum at iv. 285 is certainly correct.) L's deuiaque (so $G^{2}$ ) is a clumsy attempt to emend diviaque; and therefore Jacob's debilia, based on it, has little value. I can attach no


Hexagona
meaning to deuia commercia; and -que is not possible as a connecting particle in this place.
361. praecludens: i. q. excludens (praecludens $=$ praedudes $=$ praedales M, praedat Ven., per tales cett.), 'missing out.'
limes : so all the MSS. limes is used by Manilius at i. 607 for the line of the equinoctial colure; and I see no reason, therefore, why it should not be used here for the line of the Zodiacal Circle.

Breiter alters formantur to feriuntur-an improbable change in itself; with Scaliger, he changes limes to limas-though $a$ and $e$ are not commonly confused; to limas he gives the sense of lineas, though it can only mean 'files'. The plural limas is in itself wrong:- there is, for Manilius, only one line, though it takes numerous angles;
cf. on 274 sqq. Finally Breiter adopts into the text the one thing in the MS. tradition which is certainly corrupt, per talis: for (1) per talis is a very obvious attempt to correct praedales - we can see the beginnings of the attempt in L's pretdales-and (2) talis 'such' is meaningless; 'such' as what?

Jacob's per talis . . . limos is open to much the same objections as Breiter's text.

Ellis follows 'Molinius' (he should have said Dulcinius and Aldus) in reading per calles formantur... limos. But Bentley's objection, Dic modo uerum, an ipsa sidera formantur per tales lineas, seems to me final. Bentley and Housman agree in regarding praedales (per talis) as the seat of the corruption-though Bentley also alters to formatus. Both of them, however, emend without much regard for palaeographical probability-though Housman's praeteriens is so far right as that a pres. ptc. act. is wanted. My praecludens will give the same sense as his praeteriens; cf. 376 singula transeat. The line of the hexagon praecludit singula, it passes by those signs which are not alterna.
362. deuertitur, 'turns in at,' as a traveller turns in at a deuersorium.
363. in orbem : as 154 uariantur in orbem, 'right round the Circle.'
365. scorpion: the Greek form is found with this word also at i. 268, ii. 499, 502, 513 , iv. 217 ; is Ovidian (Met. ii. 83; Fast. iv. 164 ; Hal. 116), and is used several times by Germanicus; see Neue-Wagner Formenlehre i. 206. Similar Greek accusatives in Manilius are Arcton i. 564 ; Delon iv. 635 ; horoscopon iii. 190, 205, 538; Rhodon iv. 637. The Greek nominative Scorpios seems indicated in our MSS. seven times as against twelve examples of Scorpius. I have ventured to write Scorpios throughout this book. Similar Greek nominatives, well attested by the MSS., are i. 502 Arctos M ; iv. 633 Cypros; v. 714 Delphinos GL¹; iv. 690 Epiros; iii. 389, 5 18, 608 horoscopos; iv. 764 Rhodos; iv. 804 Ninos (Ninosque scripsi : pimosque codd.). Among other Greek forms in Manilius may be noted: iv. 24 Aenean M; v. 545 Andromedan; v. 23 Andromedan M (by false analogy) ; i. 314 Borean M; iv. 646 Borean GM ; i. 436 Cepheidos; iv. 786 Creten; iv. 634 Crete edd. Creta reluctante metro codd.; i. 352, v. 715 deltoton; ii. 507 erigonen M ; iv. 678 euxeni M, euxèni L, pointing to euxeini; i. 218, iv. 792 helicen; v. 34 Iolcon (cholchon codd.); v. 130 Olenie; iv. 517 Phasidos; iv. 691 Thrace G, hrece ML¹. But Latin forms have completely excluded Greek in all the MSS. at i. 356, v. 658 Andromedam ; v. 97 Bellerophontem ; v. 126 sybo(e)tem; i. 314, 566 boream ; iv. 603 Charybdim; v. 34 Colchidis; i. 346, v. 25, 417 delphinus; ii. 32 erigonem ; iv. 755 euxinus; ii. 828, iii. 200, 504 horoscopus; v. 35 Medeam ; i. 734 Phaethontem ; v. 708 tigrim. On the other hand, it is difficult to believe that at iv. 678 Manilius wrote Maeotisque (gen.) lucus. $M$ has sacus there. Read perhaps Maeotasque Sacas(que). At ii. 740 it is just possible that Manilius actually wrote dodecatemoriu; but the suggestion, though it has the authority of Bentley (and though the form might perhaps be defended from Livy xxxviii. 13. II Gordintichos; Pliny N. H. iv. 12. 20 Criumetopon), is, I think, not very plausible. Manilius professes a genuine reluctance to employ Greek terms-iii. 40-2, iv. 433-44 (at iv. 432-4 read faciem mutare loquendi, intulimus (incidimus codd.) si uerba, piget); and he certainly avoids certain Greek names employed in astronomy by other Latin
writers, e.g. Hydrochous, Aegoceros, Carcinus. Yet when we remember how strong was the tendency in MSS. to replace the unfamiliar by the familiar, the survival in so many places of Greek forms even in words long naturalized in Latin seems to point to a marked Grecising tendency in Manilius. The Madrid MS., it is noteworthy, which stands nearer to our archetype than any other (see Introduction, pp. xxv sqq.), is the one which most often preserves for us those Greek forms.
tum : so Bentley; quo MSS., which Huet defends as = a quo; quin Breiter, inappropriately. tum $(=t \bar{u})$ was no doubt lost, or altered, on account of te following.
368. transita: i. q. omissa; not visited by the line of the first hexagon.
369. utque ea praetereas: not 'so that you may not have to bother about', but, as Scaliger rightly explains, ut incipias a signis transitis in priore orbe; 'you, the reader, pass by' stands for 'the line, as you watch it, passes by'. Hence the praeteream of editors prior to Scaliger's second edition is wrong, though Du Fay retains it-of whom Scaliger, prophetically, non quiuis sententiam huius loci capit.
quae sunt mihi singula dicta: quae ego uocaui singula (360), Scaliger; not, as Du Fay, \&c., ' which I have just enumerated one by one.'
370. ex totidem : see on 182.
371. subeuntia: 'si uerum est, significabit signa quae se inuicem uno interposito secuntur, transuersum uisum inter se non habere,' Ellis, who proposes obeuntia (sc. circulum Zodiaci). In 380 quod euntibus is usually taken as pointing to subeuntibus in the same sense. 'subeuntia sind eben die hexagona,' says Breiter, blithely. But subeuntia signa, absolutely, can only mean caelo subeuntia, i. e. orientia; and the only way of taking the present passage, unemended, is to connect subeuntia and transuersos uisus; 'they flee, as they come under, a transverse gaze', 'they shrink from the transverse gaze which they encounter'. But the text is probably corrupt.
372. inclinata acie: to this $M$ 's inclinata cue seems doubtfully to point (Bentley's inclinant aciem is palaeographically less near). Ellis objects that inclinata acies would more naturally mean exercitus in fugam uersus; and this is true so far as it goes, but the same ambiguity holds of aciem coniungit at 497 (cf. 514), and of similar uses in other writers. The context alone saves these passages from ambiguity. After all 'a broken line', in English, might mean exercitus in fugam uersus, but no one would so understand it in a geometrical writer. The expression inclinata acie uidentur seems to me Manilian, and parallel to iii. 403-4 neque enim circumuenit illum recta acie (cf. ex recto 373).

Jacob's inclinat acne (inclinant acnae, Ellis) is overlearned, and it is doubtful whether acne can mean uirga (gromatica), as Jacob takes it ; see Ellis ad loc. Moreover, even if acne = uirga, it is not correct to describe the uirga of the hexagons as nimis inclinata; it is nimis tortuosa, flexuosa, if you like; but it is not more inclinata, indeed less, than the uirga of a triangle. [Juv. vi. 7o acne $P$ : acii al.]
374. tertia : signs separated from one another by one intervening sign. He is still speaking of the alterna signa: cf. 572 (where

Bouché-Leclercq strangely takes tertia as the signs of a quadrangle, p. 171 n.).
$\dagger$ conuerso†: conuerso MSS., which Breiter thinks it possible to defend as 'durch das Zurücktreten des Bogens'. But recessu = 'das Zurücktreten', and how are we to get 'des Bogens' out of conuerso? Yet conuexo, the commonly accepted correction, is made somewhat suspicious by the recurrence of the same word in the next line. conuerso has perhaps displaced some such word as secreto.
375. et quia: so $M$, and to this the et $q u$ of $L^{1}$ points, though Breiter prefers $G$ 's et quae; 'and because the line (of the hexagon) approaches near to the concave heaven, in such a way as to pass by singula astra (non-alternate signs), the vision of the hexagonal stars is distant from earth and wanders in high Olympus.'
376. singula non-alternate as at 361, where praecludens = quae transeat here.
377. uisus eis: so Ven. (Bentley) for uis eius of MSS. uis . . . mittit uires is intolerable, surely ; and for uisus cf. 352-7 (the converse of the present case), and note there, where effectus =uires here; Plin. N. H. ii. 41. 110 stellas insignes effectu uisuue.
379. sub lege propinqua: sub cognatione sexus, Du Fay, rightly.
380. tquod euntibus $\dagger$ : Scaliger interprets euntibus by ordine. incedentibus, secundum ordinem suum, altering sed in 381 to sex, and se coniungunt in 382 to sex coniungunt (sex coniungunt is found already in Bonincontrius). We may allow to Scaliger the merit of being the first editor to offer a text which will at least construe-the Edd. Vett. are plainly untranslatable. But it was left for Bentley to lay his finger upon the real seat of the corruption. Bentley saw at once that quod euntibus was impossible-though his own alternantibus has no probability ; and at the same time he corrected se coniungunt (382) with certainty to secum iungunt. Breiter and Ellis follow Bentley in locating the principal corruption at quod euntibus. Breiter, emending to subeuntibus, gives to subeuntibus the same force as he postulates for subeuntia at 371 , where see note. Ellis suggests coeuntibus $=$ alternis se coniungentibus. But coeuntibus astris will mean merely 'allied stars', as iv. 301 in se coeuntibus astris; and it is not true to say $\dot{d} \pi \lambda \hat{\omega} s$ that allied stars are of the same sex. In this case they are, because we are dealing with a specific sort of allied stars; but coeuntibus astris does not give their specific sort.

381-2. Breiter accepts Scaliger's sex maribus and sex coniungunt. But (1) Ellis' note on sed maribus is decisive: sed aperte respondet particulae non (380); while (2) Bentley's et nota secum : hoc est feminea cum femineis, non cum masculis might have given pause even to an editor careless of rhythm.
383. sic quamquam alternis: quanquam (for MSS. quicquam) is due to Bentley : quanquam alterna sunt, quod obest, prodest tamen quod cognata sunt. Breiter retains quicquam (with paret) as = 'to some extent'. 'Sprachlich auffällig,' he says; and so in all conscience it is.
paret natura figuris: natura, not 'nature' (the figurae obey ' nature ', not conversely), but 'sex', as 4II. figuris $=\sigma \chi \eta \mu a \tau \iota \sigma \mu$ is, Scaliger; perhaps merely $=$ signis cf. 454.
/ 385-90. There is no consensus between signs which are next to one another.
385. haerentibus: i. q. wicinis.
386. nam consensus, hebet quia uisus, ademptus. I have here 103
changed the punctuation: for (1) hebet is natural with uisus, unnatural with consensus; (2) the consensus of uicina signa is not 'dim', but non-existent-non ulla datur concordia (390).
387. seducta : i. q. remotiora.

388-9. 'Moreover, these signa haerentia are of different sex, masculine placed next to (conexa) feminine in the Circle, and so each is attacked by its neighbour.'
391-4. Signs separated by four intervening signs have no common bond.
391. sexta : explained by 393 mediis summota quaternis, cf. note on tertia (374), where similarly the quaeque is omitted. The construction is rightly explained by Bentley : sexta quoque signa habentur commoda in nullas nires; commoda adj. not subst. The adj. is found only here in Manilius. But Propertius ii. 27. 4 quae sit stella homini commoda quaeque mala suggests that it may have been proper to the vocabulary of astrology.
392. par non ducitur: explained by the two lines that follow. Draw your line from Aries to Virgo, from Virgo to Aquarius. You then have two ductus, each covering 150 degrees; but from Aquarius to Aries there is room for a tertius ductus only of 60 degrees; the orbis is absumptus.
393. duo signa: (the line may, of course, strike tria signa, e. g. Aries, Virgo, Aquarius; but of these three) only two are mediis summota quaternis; Aquarius is tantum duobus mediis summotus $a b$ Ariete.
395-432. Signa Aduersa $=$ Contraria $=$ Septima quaeque. $\quad$ (For the Contraria see figure, p. 105.) Hostile owing to their position, they are sometimes friendly owing to community of sex. Manilius' general conclusion is given more plainly at 648-52 quaeque secans medium diuerso limite caelum . . crebrius aduersis odium est. The ancient astrologers never determined whether the diametrical relation was favourable or unfavourable. For Geminus it is favourable; for Ptolemy unfavourable; for Firmicus semper maligna ac minax; for the author of the Hermippus favourable owing to the propitious character of the number 7. (Neither Ptolemy nor Firmicus, however, is clear and consistent.) See Bouché-Leclercq, pp. 167 sqq.
-400. tempora, 'the exigencies of a situation.'
401. stellis: hic uniuersim accipe, non planetas, Bentley. But perhaps here 'the stars that form their particular constellations', which may be what Breiter means by 'stella steht auch allgemeiner für signum ', but i. 755, v. 30,740 , which he cites, are not in point.
409. This line stood at the foot of fol. 31 r . in our archetype. Nimirum et hic uersiculus irrepticius est et ineptus, Bentley, not knowing this. The line is certainly not bettered by Jacob's hos cursus (so, too, Breiter). Qui cursus? Scaliger's rursus, again, as Bentley says, как $\hat{\omega}$ какòv lááaтo. (The repetition contraria... contraria $409-10$ is a piece of carelessness which may be paralleled from other parts of the poem. cursus (to which Bentley objects fixa sunt) is no more strange than uolatus would be ; cf. 415 aduersi uolitant.)
410. The subject to fulgent is signa. aduersis ... signis, 'with opposed standards,' playing on the double meaning of signum. There is the same play on words at v . 1 signisque relatis. So, too, Ovid Fasti iii. 113-14 non illi caelo labentia signa tenebant, sed sua quae magnum perdere crimen erat. Cf. ib. i. 309-1o. At Germ. Arat. 118-19 nec parui terminus agri praestabat dominis signo tutissima
rura (where iustissima, Orelli; sine eo tutissima, Lachm. ; signo tutis sine, Baehrens) it is conceivable that signo = signo Astraeae, Iustitiae with a play on the sense of a 'landmark'. Prudentius Symmach. i. 464-6, speaking of the Labarum plays on the sense of signum 'standard ' and signum = signum crucis 'sign of the Cross'; so on Christus-crista ib. 487-8. Similar is the double meaning given to another military term ala at Verg. Georg. i. 382 coruorum increpuit densis exercitus alis. See also n. on 887.

4II. natura, 'sex'; see on 383.


## Signa Adversa

412. et genere: exemplis. No convincing emendation has been suggested. I have provisionally printed genere, with Breiter, \&c., and I would then take exemplis either (1) closely with mutua: 'a concord mutual in the matter of example,' i. e. a concord which each teaches to the other; or (2) with paribus, removing the comma ordinarily placed after surgit in 412. This, though I have no confidence in it, is at least better than Du Fay, who interprets exemplis as =exempli causa. What Breiter understands by exemplis he does not see fit to say, and I am not German enough to divine.

Bentley's et generis uinclis hits the sense needed, but is too far from the ductus litterarum; yet I prefer it to Housman's (Jacob's) et genere amplexis, which I think not Latin. Perhaps nec genere exemptis, i. e. et non exemptis genere; for nec $=$ et non cf . nec similis
i. 71 , ii. 41 , and Housman on i. 656. The usage is Augustan, e. g. Verg. Ecl. ii. 40 praeterea duo nec tuta mihi ualle reperti, and among postAugustan poets is greatly affected by Lucan, e. g. i. 72 nec se Roma ferens; iv. 17 nec . . colle minori, \&c.
413. mascula si paribus: I have given this line as restored by Scaliger. paribus (maribus, Bentley) must be retained if exemplis be sound, and may perhaps in any case be defended by disparibus, 'of different sex,' in 390. Bentley complains of si ... si. Quid autem hic uolunt si ... si? certe in contrariis . . . nunquam non respondent mascula maribus, feminea feminis. But, while it is true that all contraria are of the same sex, it is not true that they all respondent generi. Feminea feminis, uir magne, non semper respondent: quippe, si insequentes uersus legisses, inuenisses Cancrum Capricorno repugnantem (417).
si ... si, therefore, resumes interdum in 41 I , and means 'in certain cases where the tie of sex asserts itself'; in some cases, e.g. Cancer and Capricorn, it does not.
419. hinc: a Capricorno.
420. hinc: a Cancro.
nudusque in solibus orbis: for in solibus (Bentley) the MSS. offer in collibus, which Pingré renders by 'les coteaux arides et desséchés'-and this is perhaps just possible, 'the earth is bare in the matter of its hill tops,' which get the full glare of the sun. In support of this I would adduce Gratius, Cyneg. 421 ut nudis incumbant uallibus aestu. Jacob interprets orbis as $=$ 'tout le monde,' everybody; everybody is in the hills with his coat off, looking after the vines and what not; of which Ellis says truly that it is 'uix latina locutio', and Breiter, probably less truly, that it is 'nicht ernst zu nehmen'.

Ellis reads nudaeque (or, coll. 772 nudisque) in collibus urbes: 'sub Cancro deseruntur urbes, colles petuntur'; but this seems to me more Statian than Manilian.
421. noctes enim hibernae sub bruma, h. e. sub initio Capricorni, aequales sunt diebus aestiuis sub solstitio, h.e. sub initio Cancri, Du Fay.

Breiter's aequans 'der Concinnität halber' is to me unintelligible. quia in 418 (there should be only a comma at aestas) governs aequat in 421; 419-20 are parenthetic, explaining brumae dissidet aestas.
422. annus: annum of MSS. can hardly be anything but a blunder; discordant illos, 635, has no MS. authority, and declinat diem (Ellis), 797, is no parallel.
423. ne: G has nec; but here, as well as at 577 (though there nec is attested by all MSS.) and 951 ( $n e$ all MSS.), q.v., ne . . . is preferable. I note here a passage of Catullus where, though a similar use of ne is recognized, there is a faulty punctuation which should be corrected thus:-

## LXVIII. 135-40:

> quae tamen etsi uno non est contenta Catullo rara uerecundae furta feremus herae.
> ne nimium simus stultorum more molesti, saepe etiam Iuno, maxima caelicolum, coniugis in culpa flagrantem continet iram, noscens omniuoli plurima furta Iouis.

All editors place a comma at herue in 136 and a full stop after molesti in 137. Quo quid insulsius? At Juv. xii. 93 sq. the true read-
ing is, as Lachmann saw, ne suspecta tibi sint haec . . . altaria, paruos hic habet heredes (nec an neu codd.).

In 429 I have written permixtusque for permixtosque, but have not otherwise altered the text of this difficult passage. At 424 I have retained repugnat; and this seems necessary if ratione pari est, in 427, is sound. The subject of ratione pari est is, of course, signum, and not et hoc et illud-as Breiter. But if repugnat and pari est be sound, then, not Libra et Aries, but tempora must be the subject of efficiunt in 428 ; and the object of efficiunt must be quo minus decertent (decertant has no MS. authority) in 431. This will explain why I have changed permixtosque to permixtusque (429).

In $425-6$ the quia of quia differt is carried on to (quia) implet; -the ordinary punctuation obscures this. Postgate transposes 426 and 427.

The construction of $428-31$ is : temporaque simili textu concordia et permixtusdies,seruantia (i.e. temporaet permixtus dies quaeseruant) uno tempore et hiemem et aestatem,-quoniam articuli (in quibus sunt Aries et Libra) medii inter hiemem et aestatem positi sunt,-(haec omnia) efficiunt quo minus infesto bello decertent sidera.

The repetition tempora (428) ...tempore (430) is a piece of carelessness similar to that noted on 409.
430. articulis: cardinal points, as 657 in quibus articulos anni deus ipse creauit; Plin. N. H. xviii. 222 cardines singulis etiamnum articulis temporum diutiduntur; cf. anni nodus, Lucr. v. 687-8.
432. For the position of this line in the pagination of the archetype, see Introduction. diuersis cannot be taken as $=$ aduersis, and editors are generally agreed in rejecting the line.
433-52. Each sign has its tutelar deity. See Figure. Editors, from Scaliger onward, have noticed the irrelevance here of this passage (as well as of 453-85). The list hardly belongs to scientific astrology at all-nothing could be more naïve than the principles by which particular tutelae fall to particular deities, as e.g. Mercury has the tutela of Cancer because Cancer possesses a testudo, as did the tortoise which Mercury converted into the Lyre. We seem to be somewhere midway between an astrology of planetary oiko and the popular dogma which assigned certain months to certain gods. The Kalendarium Rusticum, C. I. L., i. $1^{2}$. pp. 280 sqq., gives a similar disposition of tutelae with both the names of the months and the Zodiacal signs. In the Kalendarium, however, the tutelae are each thrown back a place, so that e.g. Pallas guards not Aries but Pisces, Venus not Taurus but Aries, and so on throughout. (Mommsen's explanation of this discrepancy is no doubt right : ' . . . man einerseits das in der Mitte des Monats eintretende Thierkreiszeichen, andererseits die Schutzgottheit des zu Anfang des Monats obwaltenden Thierkreiszeichens auf den ganzen Monat bezogen hat': Römische Chron. ed. i, p. 268.). The Altar of the xii Gods at Gabii (Visconti Mon. Gab. tav. 7-8) points to the Manilian system (e.g. the tripod of Apollo stands against Gemini). The list is in origin clearly not Roman-for in that case Mars would have had the tutela of Aries = mensis Martius, Juno of Cancer = mensis Junius; as in the lists in Scaliger Astron. Vet. Scripta, Sanctandreae 1589, pp. 159-67; Bücheler Carm. Epigr. i, pp. 205-6, 210. Mommsen (Römische Chron. ed. i, pp. 264 sqq., ed. ii, pp 305 sqq.) traces the list back to Eudoxus. Eudoxus, however, he supposes simply to have adapted oriental sources, Egyptian or Chaldean. Boll, in an Appendix (Sphaera 472-8) upon Valens' $\Sigma \phi a \imath \rho ı \alpha^{2}$, follows

Mommsen, but will allow only of a Chaldean source for Eudoxus. Besides Mommsen and Boll see Bouché-Leclercq, pp. 182 sqq.
433. his animaduersis : his animum aduersis, Verg. Georg. ii. 259, iii. 123 .
debes: rebus MSS.; retained by Scaliger, Du Fay, \&c., who seem to take the construction as quae proxima cura est ea est cura noscendi. So Stoeber, if I understand him. But Bentley justly says, noscere nihil habet quocum in constructione iungatur. Bonincontrius, Jacob, Bechert, Breiter think to remove Bentley's objection by placing a note of interrogation at cura. Their grammar is thus better than Scaliger's, but their feeling for Latin worse. Bentley's restat is palaeographically weak. My debes is a small change and yields the required sense. Prof. D. A. Slater takes cura as pres. imper. of verb curo, and quae proxima as = dà proxima; the infin. noscere will then be dependent on cura. This ingenious suggestion is new and, I think, attractive.
435. Breiter rightly sees here a reference to the Stoic doctrine that the gods are personifications of the virtues; cf. Schmekel, Middle Stoa, p. 243. For a different view see Cramer.
-438. pondus ... persona: rather differently Prudentius Symm. ii. 646 mentitumque grauis personae inducere pondus.
439. Lanigerum : Pallas is lanifica; cf. Servius Aen. ii. 259.

Taurum: Taurus is diues puellis (iv. 519); habitatque puer sub fronte Cupido (iv. 151); see n. on 153.
440. formosos Phoebus Geminos: because formosos. The identification of the Twins as either Apollo and Hercules, or Apollo and Bacchus, is hardly in point here, despite Bouché-Leclercq, p. 184.

Cyllenie Cancrum : propter Cancri testudinem.
441. The Lion is, of course, peculiarly associated with the Magna Mater: Catull. lxii ; here with Jupiter partly, perhaps, because he is pater deum, partly, and rather, because the Lion is $\beta$ aoridiokos and

tuque pater for Iuppiter et, Bentley, with some probability.
442. spicifer: the word is not earlier than Manilius; cf. Inscr. Orell. 5863; Carm. Epigr. (Bücheler) i. 24, where Virgo is called spicifera, iusti inuenti ix, urbium conditrix; Sen. H. Oet. 598 spicifera dea (of Ceres).

Cereris : propter spicas.
fabricataque Libra Vulcani: Libra quippe fabri opus est, Vulcanus uero deorum faber fuit, Du Fay.
443. Mauorti Scorpios : propterea quod pugnax.
444. uenantem Diana uirum sed partis equinae: 'the huntsman that is half horse'; cf. i. 409 pars hominis, tergo pectus commissus equino.
445. angusta: (cf. i. 271) 'cramped', or even 'shrammed'-the epithet belongs properly to Capricorn who is gelu contractus in astris (252).

Vesta: the deity of winter fires.
446. 'Aquarius, opposite Jove, is Juno's sign': ex Iouis aduerso, apparently for 'opposite Jove's sign', i.e. opposite Leo ;-Leo and Aquarius are contraria. The MSS. have et Iouis aduerso, which Breiter calls 'zulässig'. Bonincontrius reads et Iouis (sub. astro) aduersum ; so too Ellis. The rainy sign, Aquarius, belongs to Juno as goddess of the atmosphere. For Juno as a personification of the atmosphere see Heinze Vergil's Epische Techniki, p. 292, ed. 1903.
ex Iouis aduerso betrays the principle of diametrical arrangement governing Manilius' catalogue. Jupiter-Juno, Pallas-Vulcan, Venus-Mars, Phoebus-Diana, Mercury-Vesta, Ceres-Neptune are all pairs of opposites.
447. aequore : Bentley in a highly sophistical note proposes aethere.
agnoscitque suos $=$ Verg. Aen. iii. 347; Ov. Met. v. 212.
449. stellas et sidera: 'planets and Zodiacal signs,' since the godheads which have just been said to influence the Zodiacal signs are, many of them, planetary godheads-though Manilius, in his work as we have it, nowhere treats planetary astrology. See Introduction, p. lxxii.

453-65. Each member of the human body is under the tutela of a particular Zodiacal sign.

The scholiast on Aratus 544 attributes the invention of 'Zodiacal Melothesia' to 'the Egyptians' (the 'Chaldean' origin which Sext. Empiricus claims for it means nothing; for to Sext: Empiricus all astrologers are 'Chaldeans'); and to the Egyptian Priest-as-MedicineMan we may plausibly assign the origin of the whole system of 'iatromathematic', of which this passage of Manilius is a wandering fragment.

Manilius' Melothesia (which is reproduced in Paulus Alexandrinus, Porphyrius, Firmicus, and Sextus Empiricus, and seems to have been known to St. Augustine-Haeres 70) is highly primitive in conception. The human body is outstretched and, as it were, rolled round, or wrapped about, the Zodiacal Circle, in such a way that the head rests on Aries, the feet on Pisces; the intervening signs receive the other parts in order, as Taurus the neck, Gemini the shoulders and arms, \&c.; detail in notes foll. (See also Boll, Sphaera, pp. $47 \mathrm{I}-2$. .)

453-6. The grave difficulties which belong to these lines are met on the part of commentators by a discreditable conspiracy of silence. Few of them have any note at all, none suggest any doubts. My own rendering (in the Translation) is given hesitatingly; and the following points call for comment:-
(1) Scaliger ${ }^{2}$, Junius, Stoeber seem right in taking parentia at 454 as $=$ comparentia (parent in signa, Scaliger ${ }^{1}$, taking parent in as oboediunt);
(2) figuris cannot here mean the human shape; it seems rather to stand, as perhaps at 383, merely for signis;
(3) The antecedent to quis in 455 is neither figuris, as Du Fayfor the members do not exercise power in the stars, but uice uersa; and Du Fay is further at once refuted by iv. 700 in quibus assererent praestantes sidera uires (cf. the whole of iv. 696-710), as well as by iv. 808 q. v.-nor, again, membra, as Pingré (whose rendering involves an impossible distortion of the order of words in 454); but far rather hominis partes in 453 , line 454 being, so far as the construction is concerned, a mere amplifying parenthesis;
(4) From this it follows that the subject of exercent in 456 is sidera in 453 ;
(5) The meaning of praecipuas toto de corpore uires seems to be settled by the parallel in iv. 700. It means no more than does there praestantes uires; it means, that is, 'especial' or 'pre-eminent' powers; but the 'especial' character of the powers is here given precisely by saying that they are 'especial' toto de corpore; they are powers proper to that particular part, out of the whole body, which belongs to a given sign.

Housman, despairing of the passage (perhaps justly), suggests ingeniously singulaque imperiis propriis parentia membra (piis of impiis ( $=$ imperiis) dropped out before ppriis ( $=$ propriis), and figuris came in as a metrical stop-gap). The antecedent to quis will then, I suppose, be sidera.
[I append, for 454-6, the renderings of Du Fay and Pingré : et quae singula membra exercent suas peculiares uires ex toto suo corpore, Du Fay; et la dépendance oì est chaque membre de son propre signe, qui déploie principalement sur lui toute lénergie de son pouvoir, Pingre.]
-456. Aries caput est: in the Astrological Catalogue, vi, p. 83, Aries is actually the head, as Pisces the feet, of the Cosmos.
457. Tauri : a 'bull's-neck' is proverbial.

458-9. in geminos scribuntur: cf. on 268. Bracchia and umeri go to Gemini because there are two of each.
459. pectus : the breast belongs to Cancer because of the testudolike formation of the ribs.
460. laterum regnum : cf. Catull. 1xiii. 81 age caede terga cauda, tua uerbera patere. The characteristic action of the lion is latera, or terga, uerberare.
461. descendunt : Bentley's concedunt, Housman's discedunt seem unnecessary (and, with accedunt 463, even clumsy); Manilius is going down the body and down the list of signs.

The want of fitness with which the ilia are assigned to Virgo was early commented upon; cf. Bouché-Leclercq, p. 319 n.
462. libra regit clunes: the clunes are regarded as poising the whole body.
463. accedunt: 'sue to,' as inferiors approach a superior or master ; cf. regnum (460), imperitat (464), arbitrium (465), iura (ib.).
464. imperitat: so Bentley for imperat et MSS. (imperandi for imperitandi, Tacitus Hist. i. 52. 10, cf. Fisher ad loc.; negitatque + negat atque, MSS. Hor. Epist. i. 16.49). Ellis (proposing imperat in) urges that Manilius avoids frequentatives. This, as has been pointed out by Bitterauf, is hardly correct. Among examples given by Bitterauf, I cite the following:-acceptare iii. 439; consultare i. 92; dictare ii. 124, iv. 177, 569; dormitare iv. 234; ductare iv. 787 ; gestare i. 344,783 , v. 387 . uolitare and its compounds are also, of course, common.
crurum : i. e. tibiarum.
fundentis : absolutely, as in the doubtful example at 232 ; but not elsewhere.
466-519. Certain signs have friendships, \&c., among themselves quite independent of the relationship arising out of their membership of a common triangle, quadrangle, \&c. (i.e. quite independent of all that has been noted in 297-432). They gaze at, listen to, love one another, just because God when he ordered the mundus so directed their eyes, ears, hearts-even as men love one another and know not why.

The astrologers recognized two kinds of association among signs: (1) polygonal association; (2) parallel association. Of (1) Manilius has spoken in 297 sqq. The governing principle of ( 2 ) is fairly simple. Signs situated in the same parallel are related; they are $\xi u j_{v \gamma a}$ or $\delta \mu \dot{\delta} \omega \nu a$. (a) When they are situated on lines parallel to the axis of the equinoxes they are said to see one another, to be $\beta \lambda^{\prime} \dot{\epsilon} \pi=\nu \tau a$; when they are situated on lines parallel to the axis of the solstices they are said to hear one another, to be ákovovza, ívaкovovio. That is, signs of
like latitude see, signs of like longitude hear, one another. This parallelism leaves Cancer and Capricorn (among the $\beta \lambda \dot{\epsilon} \pi \boldsymbol{m}_{\text {ovra }}$ ) and (among the áкoviovta) Aries and Libra, ä§vya, unrelated. They are said to see-or hear-themselves. (b) The equinoctial signs love the sign preceding them (Aries-Taurus, Libra-Scorpion); and relations of love or hate connect the pairs situated on lines parallel to those uniting these equinoctial pairs (viz. Pisces-Gemini, Aquarius-Cancer, Capri-corn-Leo, Sagittarius-Virgo) ; see Fig.

The system here followed by Manilius was already before his date discredited among scientific astrologers. It is severely criticized by


Geminus (Isagoge, ch. 2). Its $\pi \rho \hat{\omega} \tau o \nu \psi \in \hat{v} \delta o s$ consists in the fact that it assumes that the cardinal points in the tropic signs are in the middle of those signs. This heresy Scaliger supposes to have originated with Eudoxus. Subsequent astronomers (among them Geminus) transferred
 the signs. This rearrangement involved a completely different system of $\xi \dot{v} \zeta v y a$. The new system may be seen in the 'Antiscia' of Firmicus ii. 27 sqq., in substance the same system as that of Ptolemy (Firm. ii. 29). Firmicus professes (ii. Praef.) to follow Dorotheus of Sidon.
466. propriis ... legibus: leges due to individual character, and not arising out of the cognationes enumerated in 217-432.

469-70. conuersaque quaedam in semet : a condensed expression by which Manilius means probably to indicate not merely that certain signs se amant, but also that certain signs se uident and se audiunt. His meaning would be more fully put by in se convertuntur alia oculis, alia auribus: alia proprio fauore ducuntur.
468. auribus: ablative, as iv. 751 uestibus haerent (which means 'belong to Aries in the matter of their garments').

47 I. idcirco: with quod 475 (there should be only a colon or comma after 474) ; cf. 178, 180.
aduersis: contrariis ' non quidem sede et loco sed natura et lege', Du Fay, but wrongly and foolishly. The propriae leges (466) override the leges set forth in 395-432, by which contraria are hostile.
472. sociata: i. e. et signa quae inter se sociata sunt bellum contra ả $\lambda \dot{\lambda}_{\eta} \lambda$ ous gerunt.
472-4. alienaque sede . . ., \&c.: ' and signs hostile by position bring to birth men that are bound forever in friendship, while men born under the signs of the same triangle (triquetris orti) contend with and shun one another.'

I thought that Housman's correction of M's utrique trisorti had only to be seen in order to be accepted. Yet Breiter does not so much as notice it. aut odium foedusue gerunt, says Manilius (469), of the individual stars propriis legibus. He goes on to say that these priuata odia and foedera override the relations imposed on the signs sede, by their geometrical arrangement, \&c. As a consequence even aduersa are sometimes friends ( 47 I ); while signs of the same triangle (or those born under such signs, which is the same thing), signs which should be sociata, are often hostile. Could anything be more perspicuous or more certain?
triquetris: is not elsewhere used by Manilius as =trigonis. But see the lexicons, s.v. Similarly triangula signa occurs only at ii. 282.
476. uariantibus : predicative.
477. contulit, 'brought together.'
484. 'Who derive their character from the stars that build their nativity.' genus : not their 'birth', but their 'sort ', 'kind' ; naturas suas, Du Fay.
artus in Du Fay's text is a mere misprint, but he comments : Gemb. ortus : id est natiuitates: quae lectio minus probatur!
485. consilium ipse suum est: se amat says Breiter, forgetting at once all his Latin and all his astrology. The words are merely $=$ se audit below. Aries takes advice from no one, he listens to himself, ut principe dignum est. If Breiter did not know that no sign se amat, he might at least have remembered that self-love is not a very royal quality.

486-7. Taurus 'plots deceit for (hates) Aries ; and beyond Aries beholds, through Aries' stars, and hearkens to, the shining Fishes'.
ultra: =ultra Arietem, since Aries alone separates Taurus from Pisces; so, too, per sidera $=$ per sidera Arietis.

488-9. A glance at the accompanying figure, p. 111 , will show (1) that Taurus in fact sees not Pisces but Virgo ; (2) that not Taurus, but Sagittarius, loves Virgo (Virgine capitur). These two difficulties have led to a number of emendations, none of which are worth consideration. (uidet seems guaranteed by the epithet fulgentis; emend away uidet, and you have fulgentis audit Pisces, 'hears the

Fishes shining across the stars'. Yet fulgentis geminos audit ... Pisces, Housman ; a very wooden emendation, in which fulgentis is otiose and the combination fulgentis geminos intolerable.) The two difficulties uidet Pisces, Virgine mens capitur must be considered together. Bentley's explanation, repeated by Breiter (noster hic maluit se poetam magis quam astrologum ostendere: et sciens prudens schema deseruit ut Europam et Iouem induceret), is valueless. For (I) if Manilius had merely wished Europam et Iouem inducere, he could as well have done so by saying that Taurus beholds Virgo (which is true), as by saying that Taurus loves Virgo (which is false); (2) why, in any case, should Manilius, in addition, say that Taurus beholds Pisces? What has that to do with Jove and Europa?

Nor is it possible to attribute to Manilius here either ignorance or carelessness; not ignorance, since at $492,499,503,513$ he shows that he knows the facts; and not carelessness, since at 488 the statement that Taurus both hears Pisces and sees Pisces is of such a character that its astrological impossibility would be immediately patent to any one making it, for it involves an identification of $\beta \lambda$ ќтоутa and àкóvovтa. To say that 'Demophilus' or Paulus Alexandrinus made this identification does not help us. Why does Manilius make it only in the case of Pisces and Taurus?

The text is sound ; ${ }^{1}$ and what Manilius has written he seems to have written with knowledge and deliberation. The explanation of the problem which his words involve seems, however, no longer in our power.
491. indutusque Ioui est: the series ipsa orationis (Bentley) demands est. Scaliger's Iouem is not necessary, and his view that Ioui is ablat. (as parti, 726, iii. 395) is, of course, absurd ; for, as Huet says, Iupiter indutus erat Tauro, non Taurus Ioue. Iupiter induit Taurum, puts on Taurus as a disguise, and so Ioui Taurus indutus est, Taurus is 'put on' by Jupiter. [Luc. iv. 132 caesoque inducta iuuenco: induta, Cod. Montepessulanus man. alt.]
496. captatur : not 'is loved', as Scaliger and all editors, I think, except Huet, but 'is hated'; and so, too, 518 ; cf. n. on 510 . Not only Latin, but, as I think, the schema which Manilius is following, makes this interpretation certain. For, taking captare as $=$ odisse, then it will be found that each of the feminine signs is loved by a masculine sign which it hates. (This can only be inferred for Capricorn and Pisces, of whose loves and hates we are told nothing.) This, and not the ordinary view, is consistent with what is said elsewhere of the relations of the sexes in the Zodiac, e.g. ii. 379-84, 388-90, 410-18. It is surprising that Bentley, when he truly, at 503 , emended auditque to oditque, did not remark on this resistance of the female signs to the advances of the male; and still more surprising that subsequent editors have not noticed this piquant feature of Manilius' schema.
497. leơ : so always in Manilius (save v. 698 (?)) ; the elisions at 246, 523 point in the same direction. So Virgö, 286; yet Virgö, 238, 248.
501. suos . . . sensus : i. e. ea quae ipse sentit, sua consilia; and so sensus is used in good prose. Libra hears himself; see n. on 485. sensus uocat hic auditus, Scaliger, incorrectly, I think; yet for sensus $=$ auditus we might, conceivably, compare Culex io ut tibi digna tuo
${ }^{1}$ ultra ' just the other side of Aries' guarantees us against such changes as Erigonen uidet in 488.
poliantur carmina sensu. quia uidet et audit sc, Bonincontrius, absurdly, punctuating full at uidendo. For the alliteration cf. Cramer, Man. El. pp. 43-4 [and the recently published dissertation of G. Pierleoni].
502. infra : below Libra, i.e. immediately preceding Libra (below Aries, says Bechert).
503. oditque : so Bentley for auditque, with certainty ; cf. n. on 496. - 505. sinum : Verg. Ecl. vii. 33 ubiv. Serv.
509. in Augusti felix cum fulserit ortum. Much has been written upon this passage, and to little purpose. The latest commentator, Breiter, does not improve upon his predecessors. Breiter refers his readers to his note upon iv. 548. Turning to iv. 548 I read: 'Augustus was born on ix. cal. Octobr., therefore (also) on Sept. 23 under the sign of Libra, as he himself testifies in the letter written to Gaius on ix. cal. Octobr. a. u. 763-in Gellius xv. 7. 9. Manilius in ii. 508 seems to contradict this: quid enim mirabitur ille mains, in Augusti felix cum fulserit ortum, that is, Capricorn, which begins on Dec. $23 \ldots$ We must, however, assume that ortum refers not to birth but conception.' I pass by here the fact that Capricorn usually ${ }^{1}$ ' begins' on Dec. 22, not on Dec. 23, and that he 'began', when Manilius wrote, some days earlier than this; for the Romans at this time threw back the beginnings of each sign by about seven degrees. I pass by the fact that Augustus' letter to Gaius testifies only to ix. cal. Octobr. I pass by the fact that ix. cal. Octobr. is not Sept. 23 but Sept. 22, for September in 63 B. c. had only 29 days. These are errors incidental to human frailty; and, after all, nothing in the world is much harder than simple arithmetic. But the statement that because Augustus was born on Sept. 22 he was therefore born under Libra I can hardly allow to pass unchallenged. As far as the mere date Sept. 22 is concerned he might equally well have been born under Aries. Similarly the fact-or fiction-that Capricorn 'begins' on Dec. 23 has nothing in the world to do with whether Augustus was, or was not, born under that sign. These statements must be challenged because, though they are in, they are not of Breiter, but are the common stock of recent writers upon the subject. These writers, notable among whom are Freier, W. v. Voigt, and-more recently-Bickel, hold the opinion, apparently countenanced by, and perhaps borrowed from, BouchéLeclercq (pp. 384 sqq.), that the sign 'under' which a man is 'born' is that in which the sun stands at his birth. It is well then here to state plainly that the sign under which a man is born is, for the ancient astrologers, the sign that is 'horoscopating', rising on the horizon, at the moment of his birth. See Housman, Praef. Ixx-lxxi (characteristic). Have we any means of knowing what sign was horoscopating at the moment of Augustus' birth ?

Suetonius tells us (Aug. 5) that Augustus was born ix. kal. Oct. paulo ante solis exortum. Now the sun at the present time enters Libra on Sept. 23; that is to say, on Sept. 23 he rises simultaneously with the first degree of Libra. If, therefore, Augustus was born on Sept. 22 about sunrise, he was born under Libra, since according to Roman reckoning with sunrise Libra was 'horoscopating'. But it is the specification 'about sunrise' which makes all the difference.

[^110]Consonant with this passage of Suetonius is Vergil Georg. i. 32-5, which, though it does not in any way prove that Augustus was born under Libra, is yet most naturally to be interpreted in that sense.

Suetonius, however, is not consistent. In Aug. 94 ad fin. he speaks of a silver coin which Augustus stamped nota sideris Capricorni, quo natus est. But if Augustus was born on Sept. 22 under Capricorn, he must have been born not 'a little before', but some four and a half hours after, sunrise.

Now about the date, Sept. 22, it seems unlikely that Suetonius should be wrong. For the same date is given in Gellius xv. 7.9, and Suetonius himself in Aug. 31 has, consistently with Aug. 5, Septembrem quo natus erat. On the other hand, Suet. Aug. 94, in conjunction with this passage of Manilius and with Germ. Arat. 558-60 (hic, Auguste, tuum genitali corpore numen . . . in caelum tulit et maternis reddidit astris)-and finally the coincidence between these three passages and the fact that numerous coins have come down to us bearing the head of Augustus and the nota Capricorni-make it quite certain that Augustus regarded Capricorn as his 'star'. Compare, too, Horace's orte Saturno, Odes i. 12. 50. ${ }^{1}$

Of the contradiction in which we are thus involved, four explanations seem possible:-
(1) Suetonius may have made a mistake when he wrote paulo ante solis exortum. Whether it is possible to check him here by the fact that in Aug. 94 he tells us that Augustus' father ob uxoris puerperium arrived late for the meeting of the Senate (it must have been an 'extraordinary' meeting) I do not know. He specifies the hour of birth only, I think, of two other Emperors. Nero, like Augustus, was born tantum quod exoriente sole paene ut radiis prius quam terra contingeretur, xviii. Kal. Ian. (Nero 6). Vespasian was born uesperi xv. Kal. Dec. (Vesp. 2). The sign of Nero, therefore, was Sagittarius, that of Vespasian probably Gemini or Cancer. It is possible that numismatists may be able here to test the accuracy of Suetonius.

If I were writing a history of the Kings of England I should pretty certainly, when I came to the reign of Edward VII, record the fact that that monarch was born on Nov. 9. I might in addition (though it would be an unusual thing to do) record the fact that he was born at 10.48 a.m. of that day. It would probably be inferred that 1 had consulted The Times of Nov. 10, 1841. The inference would, as a matter of fact, be wrong. I, as a matter of fact, owe my knowledge that this king was born at this hour to a horoscope cast for him the day after his birth. I can go further back in history than this. If I want to know the hour at which the first Duke of Wellington was born, there are very few textbooks of astrology published in England subsequently to Waterloo which will not tell me this. Suetonius was interested in astrology, and lived among, and wrote for, persons of similar interests. It would be strange if he was not as likely to be right about the birth-hour of Augustus or Nero as I about that of Edward VII or the Duke of Wellington.
(2) Scaliger supposes the confusion of the Calendar in $63 \mathrm{~B} . \mathrm{C}$. to have been such that neither Augustus, nor Theagenes who cast his horoscope, knew the true correspondence of months and signs. Firmicus (quoted by Scaliger ad hunc loc.) tells us that the first degree

[^111]of Capricorn regem faciet it principem. Theagenes knew this as well as Firmicus after him. And taking advantage of his knowledge, he boldly affirmed to Augustus that Capricorn was the sign 'horoscopating' at his birth.

The degree of (1) confusion in the Calendar, (2) quackery in Theagenes, (3) credulity in Augustus, which this hypothesis demands, is so great that Scaliger's view has met with little acceptance. Scaliger, however, is right in emphasizing the improbability of the view that Suetonius did not know the time of Augustus' birth. [The difficulty was the subject of a correspondence between Scaliger and Casaubon; Scaliger Epist. 1627, p. 154 sq. From what survives of this correspondence, it appears that Scaliger in 1596 (four years before his second edition) inclined to the view which the second edition repudiates. He suspects that Augustus was born at sunset, Cancro horoscopante (since September, as he holds, fell then into what is now July), when Capricorn would rise ákpovú $\chi \omega s$. I cannot find any letter of Casaubon in which he attempts an answer to Scaliger's questions; and his Suetonius-which had already appeared in 1595 -has no note at all on the passages in dispute.]
(3) Scaliger in his first edition put forward a view which has been resuscitated recently by Housman. Libra is the sign of Augustus' birth, Capricorn of his conception. (So, too, Breiter, arguing, however, from different-and false-premisses.) The star of conception is not, like that of birth, the ascendant, but the star in which the sun is situated at the time of conception. In support of this view Scaliger appeals to 'Demophilus'-an error perpetuated by a long train of Commentators, including Bouché-Leclercq and the latest editors of Firmicus. The passage which Scaliger quotes from Demophilus
 бцатккฑेv rov̂ Пто入єцаiov, p. 194, para. I, Basle, 1559) ; see Boll Berl. Phil. Woch. 1898, p. 202. It should read thus: $\pi \epsilon \rho i$ ontopínov S@סiov


 applies to diurnal births; there follow, for nocturnal births, rules for finding the $\sigma \pi o ́ \rho \iota \mu o \nu \zeta \varphi \dot{\omega} \delta \iota \nu$ of the moon.) Housman (following Bouché-Leclercq, pp. 377 sqq.) appeals to Censorinus D. N. 8. § 5 . If we take § 12 of the same chapter it will be clear that Censorinus and pseudo-Porphyrius draw upon one and the same source: sol enim a nono zodio particulam conceptionis rursum conspicit кarà tpíy由vov et a decimo кaтà $\tau \in \tau \rho a ́ \gamma \omega \nu o \nu$. And with pseudo-Porphyrius and Censorinus may be set Ausonius Eclogarium ii, De Ratione Puerperii Maturi II sqq. Lines II-12 merely versify Censorinus 8. § 5 Namque ubi conceptus genitali insederit aruo, haud dubium Solem cuicumque insistere signo. Censorinus, it is to be noted, thinks to determine
 was not, therefore, troubled by Mr. Housman's difficulty that 'the moment of conception is seldom discoverable' (Praef. lxxi; what Mr. Housman's 'seldom' means I do not know ; the moment of conception is never discoverable).

That this suggested solution is more plausible than any other that has been offered I am not prepared to deny. Yet against it it may fairly be urged-as it is urged by Housman-that it assumes a blunder in Suetonius of which he was very unlikely to be guilty. It would be strange if Suetonius, confronted with a horoscope of
conception, allowed himself inadvertently to write natus for genitus. It is no doubt for this reason that Scaliger abandons in his second edition the view taken up in his first.
(4) It remains to ask whether it is not after all possible that the pre-Julian Sept. 22 fell, in 63 B. C., into or very nearly into the Julian Dec. 22. If this were so our difficulties would at once disappearAugustus' birth would fall at sunrise on pre-Julian Sept. 23, under Capricorn. The translation of pre-Julian into Julian dates involves, of course, problems of immense intricacy upon which no two scholars agree; and the field is one, let me say frankly, where I am not in any way competent to speak. I consulted, however, Mr. J. K. Fotheringham, whose authority in difficulties connected with the ancient Calendars is unimpeachable. The substance of what follows belongs to him. But I owe it to Mr. Fotheringham to state clearly that he does not regard himself as committed to the position which this note takes up. But he was at great pains to supply me with the figures and arguments for that position, and to explain to me the principal ancient authorities-with the interpretations of some modern critics-notably Stoffel in his Guerre Civile, Soltau in Römische Chronologie, Grinzel, Handbuch der mathematischen u. technischen Chronologie, ii. 160-293, and Rice Holmes in The Julian Calendar (an Appendix to his work Ancient Britain)-the most important English contribution to the subject. The calculations subjoined follow the general position of Stoffel (based upon Le Verrier; see Rice Holmes, p. 710) more closely than that of any other authority. From limits of space they are exposed here somewhat elliptically, and must not be thought to ignore arguments which they pass by.

The Julian Calendar came into operation on Jan. 1, 45 B. C. The first bissextile year was 41 b.c. At any rate, no previous Julian intercalation is attested; and, whatever may be made of Dio Cassius' statement (48. 33. §.4) about the violation in that year of Caesar's regulation, it is certain that ( I ) that year was what we call a 'Leap Year'; (2) it ended with a market day. ${ }^{1}$ That the first year of the New Calendar contained a bissexto Kal. Mart. is in itself unlikely. We have then the following correspondences:-

| B. C. | Civil | Julian |
| :---: | :---: | :---: |
| 4 1 | Jan. I | Jan. I |
| 42 | Jan. I | Jan. I |
| 43 | Jan. I | Jan. I |
| 44 | Jan. 1 | Jan. 1 |
| 45 | Jan. I | Jan. 2 |

These reckonings, and those that follow, take no account of any intercalation not directly attested. This procedure, considering the bulk of our evidence for the years between 63 and 4 I is not unreasonable. There was a new moon on Jan. 2, 45, and the new Calendar probably began on that day.

About the year 46 our evidence is conflicting. Suetonius (Jul. 40) says that three months were intercalated in that year. Censorinus (D.N. 20. 4. §8) also adds to the normal mensis Mercedonius the two months placed by Julius between November and December-reckoning these two months as 67 days. Dio Cassius, on the other hand (43.26. §§ I-2), definitely denounces this as an error, and says that the

[^112]year contained 67 intercalary days in all. Stoffel has no doubt rightly explained this contradiction in our authorities. He supposes ${ }^{1}$ that there were, as all authorities agree, three intercalary months; but that they were of the normal length of a mensis Mercedonius, i. e. $23+22+22$ days in all. Accepting this as correct we get the following:-

| B. C. | Pre-Julian | Julian |
| :---: | :---: | :---: |
| 45 | Jan. I | Jan. 2 |
| 46 | Dec. I | Dec. 4 |
| 46 | Posterior I | Nov. 12 |
| 46 | Prior I | Oct. 2 I |
| 46 | Nov. I | Sept. 22 |
| 46 | Oct. I | Aug. 22 |
| 46 | Sept. 22 ( ix. Kal. Oct.) | Aug. I4 |
|  | Then (47-46, consisting of 355 + 23 | days). |
| 47 | Sept. 22 | Aug. I |
| 48 | Sept. 22 | Aug. I |
| 49 | Sept. 22 | Aug. 2 I |
| 50 | Sept. 22 | Sept. I |
| 51 | Sept. 22 | Sept. I I |
| 52 | Sept. 22 | Sept. 2 I |

We know from various sources (1) that there was no intercalation between 52 and $46^{2}$; (2) that 52 contained a Mercedonius (of 23 days) (Asconius: Milo 31, p. 36 Clark); (3) that 52 began on a market day (Dio Cassius xl. 47. § I).

We can calculate, therefore, the number of days from 52 to 41 inclusive, thus:-


Market days recurred at intervals of eight days. In these twelve years, therefore, we have 550 market days +1 day. Our figures, therefore, are quite consistent with the attested facts that 52 began, and 41 ended, on a market day.

Between 52 and 63 no intercalation is attested. We reach, therefore, the following results for those years :-

[^113]| B. C. | Pre-Julian | Julian |
| :---: | :---: | :---: |
| 53 | Sept. 22 | Sept. 8 |
| 54 | Sept. 22 | Sept. 19 |
| 55 | Sept. 22 | Sept. 29 |
| 56 | Sept. 22 | Oct. 9 |
| 57 | Sept. 22 | Oct. 19 |
| 58 | Sept. 22 | Oct. 30 |
| 59 | Sept. 22 | Nov. 9 |
| 60 | Sept. 22 | Nov. 19 |
| 61 | Sept. 22 | Nov. 29 |
| 62 | Sept. 22 | Dec. 10 |
| 63 | Sept. 22 | Dec. 20 |

This calculation would not bring Augustus' birth under Capricorn according to our present reckonings, by which the sun enters that sign on Dec. 22. But the astronomers of Cicero's time, as I have said, placed the beginnings of the signs some 7 degrees in advance of our reckonings. If, therefore, Augustus was born on Sept. 22 paulo ante solis exortum, Capricorn was his natal sign.

No one familiar with the literature upon the Reformation of the Calendar will suppose that these conclusions are as free from difficulty as they here appear. ${ }^{1}$ Yet they are perhaps as plausible as any rival reckonings. And they seem to afford a simpler explanation of our present text than any that has been hitherto put forward.

In the Ashmole collection of MSS. in the Bodleian Library (Ash. 394, pp. 208a-212b) are preserved two dissertations upon this passage which constitute perhaps the only discussion of it between Scaliger 1600 and Freier 1880. The first is by one Bernard, whom I take to be Edward Bernard, ${ }^{2}$ Savilian Professor of Astronomy (for his connexion with Manilius see Introduction, p. xliii). The other, of interest to Manilian students generally, is by Sherburne (see Introduction, p. lxxxv). Bernard makes a petulant attack upon Scaliger. ('How does he ride and read poor Manilius! What pittiful pedantry is this? Is to write proudly and ignorantly to write like Scaliger?') Reading ipsam in 507 and quae fulserit in 509 he maintains that Augustus was born under Virgo, on Sept. 23 of the Julian year. Capricorn upon the coins of Augustus is merely ' an hieroglyphick of dominion'. Vespasian and Titus both stamped their coins with the nota Capricorni. But Vespasian teste Suetonio was born xv. Kal. Dec., 'so that he must have had it (Capricorn) in $y^{\ominus}$ meridian rather.' Libra (under which Scaliger in ed. i affirmed Augustus to have been born) is the horoscope of Rome and Italy. Theagenes could hardly have made the error Scaliger attributes to him, being 'a man not improbably one of the coajutors contriving that most excellent Calender' (the Julian).

Sherburne points out that Bernard has relied on a false text at 507 and 509, and that the true text there is supported not only by Suetonius but also by Germanicus. Augustus was born under Capricorn, but conceived (genitus) under Libra, cf. felix aequato

[^114]genitus sub pondere Librae. [Sherburne is reduced to supposing that Augustus was born at night, and that Suetonius was here in error. Among rulers who have been born under the royal sign of Capricorn Sherburne enumerates 'Charles v, Francis i of France, Charles of Bourbon, Cosmo de Medici, and Solimus the great Turke'.]
510. auribus . . . captat: apparently = audire ; and so captare, with some such word as sonitum following, is used in Conedy. In the present passage, sonitus captare Cancri would be readily intelligible; but auribus captare fastigia is so strange an expression as to bring the text into suspicion.
summi fastigia Cancri: the Sun in Cancer reaches the highest point in the Ecliptic; Lucan iv. 526-7 nam sol Ledaea tenebat sidera, uicino cum lux altissima Cancro est; Germ. Arat. 449 sqq. hoc Cancrum tetigit cum Titan orbe timeto aestatem rabidam et soluentis corpora morbos: tunc habet aeterni cursus fastigia summa.

521-38. The signs of alternate triangles are hostile to one another (521-2). This principle Manilius illustrates in the case of the first and third triangles, where the causes of hostility are most clearly seen (523-38). But it follows necessarily from 520-2 that the same principle governs the relations of the second and fourth triangles also-quamuis spatio exclusus de posterioribus his nihil dixerit (Ellis). In what follows-539-40-Manilius says that though all signs obey this law of triangular opposition, yet a good many of them wage wars of their own (priuata arma); and in 541-69 he gives a list of all the enmities of each sign, whether private enmities or enmities arising out of triangular situation. For the difficulties connected with this list see note on 541.
520. quin etiam ipsa meant aduersa: so I have tried to restore the corrupt quin aduersa meant etiam (etiam ${ }^{Q} \mathrm{~L}$ ). $[i \not i p s a=i \bar{p} a$ was lost after etiā.] ${ }^{1}$ The loves and hates of individual signs have just been mentioned; we now find that ipsa trigona are hostile.

521-2. 'And it is the alternate line that leads them to war along opposed paths.' The line drawn from e.g. Gemini to Libra is alternate to, = separated by one from, = altera to, the line drawn from Aries to Leo; and so the triangle that stands on the line drawn from Gemini to Libra is hostile to that which stands on the line from Aries to Leo.
diuerso limite: because the first sign of the first triangle is diametrically opposed to the first of the third, the second to the second, and so on ; these signs are loco contraria (as noted in 527).
522. Cf. Culex 4 omnis ut historiae per ludum consonet ordo.
525. quod $=$ quod trigonum.
excipiunt; 'carry on ', 'receive from Chelae and continue'. So I suppose, for editors are silent. But the expression excipere trigonum has no parallel elsewhere; and the natural way of taking the construction is negant Chelis foedus quod excipiunt Gemini-i. e. the foedus denied to Libra falls to Gemini.
526. uerum : 'in accordance with reason'; Cic.

531-2. 'Leo shines among the stars as having been vanquished -by Hercules, a man-and it was his golden fleece-of which he was despoiled by Phrixus, a man-that gave to Aries his place among the stars.'
${ }^{1}$ Or perhaps L's etiamq. points to etiamipa, as Catullus lxxvi. 11 teque reducis codd. for te ipse reducis.
533. ferae partis: Stoeber and Ellis defend the MSS. suae partis, interpreting tergore suae partis as tergus equinum quod partem eius constituit. I have followed Bentley (and Breiter) in reading ferce ( $=f^{\prime}$ 'ae) for suae ( = fuae). The older correction suae parti (so also Postgate, Housman) is a smaller change, but does not, I think, give the sense required. 'Centaur yields with his equine parts (tergore) to his human parts (suae parti).' Perhaps true ; but Manilius, as I understand him, is trying to say that Centaur, like Aries and Leo, is a beast who, before he came to heaven, was conquered on earth by a man.

534-5. The construction is: usque adeo est quod mirer homines ab illis uictis (pecudibus) nascentes superari posse Librae trigono? 'is there any great reason why I should be surprised at men born under these vanquished cattle being conquerable by Libra's triangle.'

The use of quod is the same as that at Hor. Ep. ii. I. 30 non est quod multa loquamur; Verg. Aen. xii. II nihil est quod dicta retractent; Cic. Div. In Caec. § 25 nihil erit . . . quod arbitretur. On this use of quod see Munro, Lucr. i. 82.

In the text as given I have changed only two letters of the MSS., correcting 'hominis uict $u$ s' to 'homines uictis'.
hominis uictus is commonly corrected to homini uictus, followed by a full stop, the subject of uictus being Centaurus. (This involves, I think, ferae partis in 533.) For the dat. homini uictus Postgate compares i. 759 , iv. 896 , which surely furnish no parallel. The older correction, hominis uirtus, is, perhaps, Latin, but it could only mean 'to such an extent is Centaurus the virtue of a man'.

The MSS. vary between quod mirer and quo mirer. Scaliger took quo mirer as ='wherefore (and so) I should marvel'; and though Bentley has pointed out that this is not Latin, Breiter thinks it is and prints it. Scaliger and Breiter with quo in 534 read nascentis . . . trigonum in 535. nascentis Breiter renders by 'der aufgehenden Wage', as iv. 516 nascentis Tauri; but why should the whole triangle of Libra be more powerful when Libra, singly, is rising than under other conditions? nascentis is clearly accus. plur., and this necessitates trigono. Postgate with trigono reads quid mirer, but this is patently awkward in its abruptness, though a colon merely after uictus removes some of this abruptness; usque adeo, 'seeing he is thus . . . why then should I marvel.'
536. I have enclosed this line in brackets, and I have little doubt that either it is spurious or it has been seriously misplaced. For ( I ) what can breuior ratio mean, following on 520-35? It can only mean a ratio which is breuior than that of 520-35. But the ratio of 520-35 is the ratio of triangular oppositions; yet so is the breuior ratio, as appears from 541-69; see note on 541. (2) How comes it that the breuior ratio occupies more space than the (longior) ratio of $520-35$ ? (3) At 570 , dismissing the breuior ratio, Manilius says of it that it is not the sola ratio, but there is also the ratio (to which he then passes) of the opposition of tertia. But, of course, it is not the sola ratio, if it has been preceded by the ratio of $520-35$. If Manilius gives us one ratio at $520-35$, another at $536-69$, he cannot possibly at 570 say nec sola est ratio-when he means that there is yet a third ratio. (4) A careful analysis of $531-8$ will show that 536 entirely interrupts the train of reasoning, thus: 53I-3 the ferina signa were conquered by men before they came to heaven; 534-5 is it then surprising that those born under signs that have been conquered (on earth) should prove
weaker than those born under, say, Libra? $537-9$ for the ferina signa remain, in heaven, vanquished and inferior (as they were on earth) to the signa humana. The argument is: the ferina were conquered and conquerable when they were upon earth. Will not those on earth whom they protect be conquered and conquerable likewise? Surely so; for the ferina themselves in heaven now, as on earth before, are conquered and conquerable. 537-9 are thus indispensable to the logic of what Manilius is saying. Now try and insert between these three lines (537-9) and 535 the line (536) which I have bracketed. You get this result: 'The ferina were conquered on earth : will not those on earth whom they protect be conquered likewise? Moreover, we must follow a breuior ratio through the signs. For the ferina themselves in heaven now, as on earth before, abide conquered.'

Clearly 536 has no place in this argument, nor in the text at this point.

541-69. In 520-38 Manilius has laid it down that the signs of alternate triangles are, conjunctly, hostile. But (a) this hostility of triangle to triangle does not necessarily and always involve each individual sign in war with each individual sign of the hostile triangle ; (b) individual signs have enemies outside the signs of the triangle alternate to their own. Manilius' scheme seems to be as follows:-

1. The individual signs of alternate triangles are throughout mutually hostile, save that in the fourth triangle Scorpion and Pisces are not attacked by the signs of the second triangle.
2. All ${ }^{1}$ the ferine signs are attacked by Virgo and Libra (save that Virgo does not attack her own triangle).
3. Virgo, Libra, Scorpion, Pisces are all attacked by the signs of their own square.
4. Scorpion is attacked by all the human signs.

The scheme involves, in fact, four principles determining enmity : (1) triangular alternation, (2) sex, (3) species-human, bestial, (4) quadrangular situation.

The following table will give at a glance the enmities of the various signs. That the mathematical grouping may be seen, I employ numbers to designate the signs: Aries $=1$, Taurus $=2$, and so on :-

| 1, 5, 9 are attacked by 3, 7, 11, and 6 |  |  |  |
| :---: | :---: | :---: | :---: |
| 2, 6, 10 | " | " | 4, 8, 12 |
| 10 | " | " | 7 |
| 6 | " | " | 3, 9 |
| 3, 7, 11 | " | " | 5, 9, I |
| 7 | " | " | 4, 8, 10 |
| 4 | ," | " | 2, 6, 10, |
| 8 | " | " | 2, 4, II, |
| 12 | " | " | 3, 6, 9 [ |

The text of this perplexed passage has been endlessly emended. My own corrections do not extend beyond an obelus at 553 and the assumption of a lost line after 562. (In addition I have, with most editors, at 542 and 552 accepted corrections of Bentley.) Yet I have, as I believe, left this passage intelligible and consistent, a result which the many emendations of previous editors have failed to achieve.
${ }^{1}$ For Pisces see note 568.
542. So Bentley ; cf. 560-2. Breiter's gemino pisce would mean not Pisces but Capricorn!
544. pectora: as corpora, $580,604,653^{\prime}$ men'.

547 . in Cancro : i. q. sub Cancro cf. 603, 455.
laedunt: the variant ludient in the MSS. no doubt arose from the spelling loedunt. The confusion of oe and $u$ is common in inscriptions; and ledere for ludere survives in all our MSS. of Catullus at xvii. I (ponte ludere longo-loedere edd. uett. and Baehrens), where see Scaliger and Baehrens.
-552-3. Cancrumque : so Bentley for Taurumque-palaeographically a small change. Taurus belongs to the same triangle as Virgo, and it is incredible that Manilius should here regard them as enemies ( 471 sqq. cannot be invoked to justify this any more than 482 ut se diligerent could be invoked to prove that some signs loved themselves). It is strange that Bentley, when he perceived the absurdity of a war between Virgo and Taurus, did not at the same time see, nor try to remove, the equal absurdity of a war between Virgo and Capricorn.
geminumque sub arcu Centaurum : é $\lambda \lambda \eta \nu i \zeta \epsilon \iota^{\circ}$ Kévtavpos $\epsilon \in i$
 with a vengeance. If the text is sound the construction must, I think, be geminumque Centaurum timet sub arcu eius ov̉ra. But there is something to be said for the early correction (resuscitated by Housman) geminique . . . Centauri.

The words et te Capricorne rigentem are, I have no doubt, corrupt. I suspect that originally 553 ran Centaurum et Pisces Capricornusque et illi-the last three words being an anticipation of the line following. For these last three words some ingenious person, comparing 365 Scorpion ingreditur tum te Capricorne rigentem, substituted the text that we have. Manilius wrote, perhaps, something like Centaurum et Pisces Geminosque et Scorpion acrem. (The homoioteleuton geminumque arcu-geminosque... acrem no doubt assisted the anticipation of 554.). The enemies of Virgo will then be Cancer, Scorpion, Pisces-the signs of the triangle alternate to her own-and Centaur and Gemini, who (with Pisces, already included) make up the square of Virgo. Virgo, like Libra, is attacked by her own square. (Virgo and Libra are the two representative human signs-female and male ; they do all the fighting ; each attacks all the ferine signs outside his own triangle.)

The fact that Virgo is here said to fear Centaur (who in 506-7 is said to love Virgo) has caused surprise. Equally surprising is it that in 559 Libra is said to be hostile to Scorpion-whom at 502 he is said to love. 568, again, contradicts 493.
554. maxima turba: Libra has six enemies, Aries, Leo, Sagittarius, Capricorn, Cancer, Scorpion-i.e. the signs of the triangle alternate to her own, and the signs of her own square. But we only learn that the Scorpion is ranged against her from 559 metuendus et ipse. Editors have one and all, until Breiter, accused Manilius of carelessness in speaking of these six enemies of Scorpion as totidem (557), equal in number to the five of Libra. But the carelessness lies with themselves. Libramque fugit metuendus et ipse means 'Scorpion attacks Libra and Libra attacks Scorpion'.

554-5. illi : i. e. Capricorno.
Chelis quod utrumque quadratum est: 'each of which is to Libra a signum quadratum', not 'is a square'-which would be nonsense. I doubt whether quadratum is ever used as a subst.
by Manilius. At 333 quadrati caeli ? At 646 quadratis signis? At iv. 331 quadrato sibi?-though, in these three places, it seems more natural to take quadratum as a subst. Comparingiv. 331 Taurumque quadrato coniunctum sibi, we might perhaps here take the words as 'each of which signs (quod signum utrumque) is squared with Libra.'
557. in totidem fecundus: as iv. 124 fecundis in uellera lanis; iv. 161 in tot fecundi commenta; cf. iv. 826 steriles ad semina terrae.
562. natura et lege: the general law laid down at 528 sqq.-the natural opposition of ferina and humana. Scaliger's naturae lege seems unnecessary, though the expression is found at i. 669, v. 375.
$562^{\text {a }}$. quin etiam Tauri quae stellis signa minantur. That some such line as I have here conjecturally appended has dropped out of our MSS. may, I think, be regarded as almost certain :
(1) haec eadem in 563 refers to nothing at all. Editors refer it to Geminis nati, \&c., in 561. This gives us a construction of this sort : hos depressisse uolunt Geminis nati : eadem, Capricorne, tibi inimica sunt. It would puzzle Capricorn by the aid of that sentence to find his enemies.
(2) Gemini, Libra, Aquarius are the enemies already of three signs (Aries, Leo, Sagittarius), conjunctly and individually. They have enough to do without molesting Capricorn. Moreover, they are a triangle which should naturally be friendly to Capricorn. There is no example in Manilius' list of any sign attacked by all three members of a non-alternate triangle. Capricorn's natural enemies are those of the other members of her triangle, those, firstly, which Taurus and Virgo have in common, viz. Cancer, Scorpion, Pisces, and further Libra, the enemy of the ferine Taurus but not of Virgo.
(3) The pagination of the archetype supports the conjecture of a lost line. See Introduction, p. xxiii-iv.
566. turba sub unius iuuenis uirtute ferarum : 'a mere rout of wild beasts when one youth's valour manifests itself.' So we must render the text if it be retained [iuuenis is, of course, Aquarius; the view, which has been held by some editors, that it is Sagittarius deserves mention only for its foolishness]. turba apparently=exercitus turbatus ; sub 'on the occasion of', as often in Manilius.

Housman writes fugiens for iuuenis; but iuuenis is needed to emphasize the human character of the victor. For the form of the line compare iv. 34 tresque sub unius fratres uirtute iacerent.
568. One desiderates the mention of Libra among the enemies of Pisces; since all the ferine signs save Pisces are attacked by both Libra and Virgo. Manilius may very well here have forgotten Libra. Or we could make room for him between 568 and 569 ; or we could boldly write et Gemini fratres et Chelae et Virginis astrum.
570-8. Besides the hostilities already enumerated, we must be prepared to find that signs separated from each other by a single sign are for the most part mutually inimical. [Manilius gives a geometrical reason for this; but there is no doubt a mythological one at work also: viz. that tertia are for the most part opposed as humana to ferina; all the masculine tertia are so opposed, and half the feminine.]
570. nec sola est ratio: i.e. neque est ratio trigonorum alternantium sola ratio quae dat, \&c. Cf. 722 nec genus est unum ratio nec prodita simplex.
571. bella: so Housman, with certainty. Breiter retains uelle. But (1) mutua uelle in itself means nothing, it cannot stand for mutue
 even for Manilius. (The same objection applies to Postgate's nolle; and can nolo te mean te non bene uolo ?) (3) Manilius is talking not of mutual love but of mutual hate.

574-6. Manilius' meaning is admirably hit by Bentley: sume quaeuis signa contraria siue opposita, cancrum et capricornum: tertia quaeque a cancro, hinc taurus, illinc uirgo, sunt trigonum capricorni. Similiter tertia quaeque a capricorno, pisces et scorpios, sunt cancri trigonum. Porro trigona cancri et capricorni aduersa inter se sunt, ut, supra, uersu 520, arietis et librae.
tertia are opposed; for signs which are tertia to any sign belong to the triangle of its contrarium.
574. quippe: so Housman for MSS. quoque (i. e. $q p$ for $q q$ ). If quoque is retained it will necessitate Bentley's illinc in 576.

577-8. 'So that one need not be surprised at peace not existing between stars that are connected with the signs of an opposed triangle '; e. g. one need not be surprised at Taurus and Virgo being opposed to Cancer, for they are both cognata with the signs of Capricorn's triangle -which is aduersum to that of Cancer.
trigoni : a necessary correction of MSS. trigona.
579-607. A digression on the rarity of true friendship, and on the many vices of human society.

The latter part of this passage owes something to the conclusion of Catullus' Peleus and Thetis. Both writers draw their feeling as much from the contemplation of Roman society as from Greek legend. The rarity of Fides is a common Stoic theme; cf. Seneca Tranq. An. xv. I, ed. Hermes, p. 272.
580. corpora, 'men'; see on 544.
quotiens: I see no reason for altering to totiens (Bentley, Breiter). The construction is quotiens inimica corpora creantur per tot signorum species (quot dixi) et tot modis (quot dixi) surgunt, 'as often as men are born hostile to one another, they arise hostile owing to just these configurations of signs (I have spoken of) and in just these combinations.'
5. 582. pectore amicitiae : a sensitive phrase in which the genius of the ancients for friendship finds telling expression. Yet from here, and from the other places in Latin poetry where it occurs (they are collected by Ellis at Catullus lxxvi. 6), unfeeling commentators have wished to expel it. Yet than phrase or thing nihil maius nec rarius. The classical languages are forever thus surprising us with an unguessed romanticism.
583. unus erat Pylades: Ovid Pont. iii. 2. 65 (82) sqq.
-585-6. I have enclosed both these lines in brackets; not that I have any quarrel with 585 , but because 586 seems to me indefensible and unemendable, and it involves in its fate 585.
et duo qui potuere sequi is a pious additum of some one who recalled Damon and Pythias. But the unus . . unus of 583, the lis una of 584 make it logically and rhetorically and poetically impossible that Manilius should have gone on to speak of these two. And then the Latin! duo what? nempe duo lites! or is it duo Pyladae? And what is the object of sequi? uix noxia poenis again is modelled on 602 poenas iam noxia uincit; and is meant to mean 'scarcely could punishment find guilt to punish'-there was the penalty for sin but no sinner. Barbare dictum, as Bentley says; and all attempts at debarbarizing it have failed. Vides quanto molimine Scaliger et Bentleius
nihil agant, says Jacob justly. He himself proposes uis noxia, and says Versus excidit de Dionysio. No : uersus inrepsit de Damone, rather.

For the pagination of the archetype (which supports the exclusion of both lines) see Introduction, p. xxiv. With optauitque in 587 it would be impossible to retain 585 (without 586) on account of raperet . . . cederet.
587. optauitque ... sponsor : i. e. et semel tantum sponsor optauit: semel tantum is given by lis una 584.
588. reus timuit : ne sponsor ipsum (sc. reumn) solueret, i. e. liberaret. The subject of the subordinate clause has been drawn into the main clause by what Scaliger calls a notus Hellenismus. Plauto quidem et Terentio notus, says Bentley, citing Ter. Eun. iii. 5'metuo fratrem ne intus sit' (to which Stoeber adds Plaut. As. i. 1. 98 nemo est quem. . . metuam mihi ne quid nocere possit-where perhaps nec qui), sed frustra apud posteriores quaeras. And if this is true we should perhaps receive Bentley's sponsorique.
591. cum fortuna fidem quaerat: si fortuna petat rationem, Du Fay, whom I suppose Breiter follows when he renders 'ein solches Beispiel der Freundestreue ( $=$ fides as at 130) zeigt das Geschick kaum einmal '. Pingré's 'si la fortune cherche la probité, la bonne foi' is nearer. And with this interpretation we may compare the conjunction fortuna . . . fides at Lucan iv. 496-9: nescio quod nostris magmum et memorabile fatis exemplum, Fortuna, paras. quaecumque per aeuom exhibuit monumenta fides seruataque ferro militiae pietas, transibit nostra iuuentus. But here si fortuna fulem quaerat goes further, I think, and is typically Manilian in its condensed epigrammatic force. It means not only 'when a crisis demands a true friend', but also and more, 'when Instability is in search of Stability' - 'when storm-tost human history seeks a lode-star'.
593. excusabile: Cramer (De Man. Eloc. pp. 77-8) notes Manilius' fondness for placing adjectives in -bilis in the 5th foot; e.g. iv. 242 delassabile, i. 143 generabile, i. 221 glomerabilis, iv. 522 glomerabile, \&c.
$593^{\text {a }}$. See C. Q. July, 1908: the reason for the loss of the line in our MSS. is self-apparent. With the whole of 592-5 compare iii. 17-19 germanosque patris referam matrisque nepotes natorumque epulas conuersaque sidera retro ereptumque diem; iv. 82-3 ecce patrem nati perimunt, natosque parentes, mutuaque armati ueniunt in uulnera fratres. Catull. lxiv. 400 sqq.
594. uenalis ad fata patres, 'fathers murdered for money'. matrumque sepulcra: Du Fay and Breiter supply uenalia; but perhaps 'and the death of mothers' alone is sufficient. I formerly conjectured (C. Q.1. c.) ad stupraque matres (which, through ad matres stupraque, passed to our present text); cf. iii. 17 matrisque nepotes $=$ matres quae per stuprum cum filiis nepotes sibi pepererunt.

At iv. 90 uenalia fata is different, 'death that can be bribed, bought off:' (dabit . . . uenalia fata $=$ uendet uitam, Prop. iv. 8, 25, as Juv. viii. 192 funerà uendant.)
$594^{\text {a }}$. Jacob rightly perceived that a line or lines had been lost here; and says ingeniously, Conquestus haud dubie poeta erat de caede Iulii Caesaris, post quem notum est Solem caput obscura ferrugine texisse. (Verg. Georg. i. 467). My conjectural line may perhaps pass in Jacob's sense; but the parallel from iii. 18-19 makes it more probable that Manilius is speaking of caligantes abrupto sole Mycenas (Stat. Theb. i. 325).

- 599. sub amicitiae grassantem nomine turbam: 'And crowds
of villains skulk behind the name of friend' (Creech). sic I. Caesar ab amicis occisus est, Du Fay. Haud dubie grassantes triumuiros intelligit, Jacob. Other editors are careful to conceal their ignorance. I can nowhere find that any one has explained the line. The reference is to the sodalitia, and perhaps supplies us with a new date in the life of Manilius. The Lex Licinia of 55 B. C., which dealt with the disorders arising from the sodalitia, seems to have been superseded by the Leges Iuliae de Ambitu (Mommsen De Colleg. et Sodalitiis, 1843, pp. 72 sqq.). The first of these Leges Iuliae was passed in 18 B. C., the second ten years later. Our present passage may very well have been written while the circumstances which gave rise to the law of 8 B. C. were still fresh in men's minds. [In that case, the conclusion of Book I will be of later date : see Introduction, p. lxi sqq.] Under Tiberius when, as Tacitus says, the comitia passed from the Campus to the Senate, the sodalitia would have ceased to furnish a typical illustration of political violence.

60I-2. legesque per ipsas saeuit nequities: not 'crime makes havoc among the laws', but 'iniquity rages employing as its instruments the very laws themselves'; cf. Seneca Prov.iii. 7 post fidem immo per ipsam fidem trucidata.
poenas iam noxia uincit: scelus superat iam supplicia, Du Fay; 'les forfaits sont enfin devenus plus grands que les supplices,' Pingré-just as Stat. Theb. i. 56 angustaque Tartara pnenis, hell is not big enough for the crimes it has to punish. [One would expect uicit; and one might take uincit as from uincire (Iniquity works now by process of law (leges per ipsas) and commits Punishment to prison) save for uincant . . poenas, Claudian Ruf. ii. 519.]
605. fidei : the same genitive at 630,955 ; to the examples cited by Neue-Wagner i. 573 add Stat. Theb. vii. 542; Sen. Thyest. 764. Lucret. v. 102 has fidè $\bar{\imath}$, following Ennius Ann. 342 (plenu' fidei) ; but nowhere else in Latin poetry (outside Plautus) do we find anything but fídĕ̃ or (e. g. Ovid Met. iii. 341, vi. 506) fidē. At iii. 107 fideique tenet parentia iura the form fidē i, dative (found also in Seneca Thyest. 520, cf. spei, dative, Phaedra 131), is false-as false as the form aquai (dative) which Brieger and Bailey have introduced into the text of Lucretius at i. 453. (See Lindsay, C. R. x. pp. 424-7. Lindsay might have noted that at Lucr. i. 687, ii. 235 rei is rendered suspicious by the fact that it is preceded at i .687 by praeterea, at ii. 235 by subsistere.),
606. ut ipsum sibi caelum sic ipsa sibi tellus dissidet; out of ipsa tellus we must supply an ipsum for caelum, otherwise ipsa tellus would imply a superiority of tellus over caelum.

60\%. sorte : 'une fatalité impérieuse,' Pingré, vaguely ; pari odio, Du Fay, correctly if inexactly ; cf. 609 amica sorte ferantur.

608-42. The interrelations of the different signs of the same triangle ; and the influence of these relations on man's destiny.

608-9. The construction is: si cupis dinoscere quae signa cognata (=trigona) iungant animos, \&c.
614. expositumque: just as we say 'exposed to'; as i. 357,427 expositam (ae) ... undis; but here in metaphor: a common postAugustan use.
suae noxae: not, as editors, 'injury of himself', but 'injury proper to him', proper to a mitius astrum molli ingenio et corpore.
618. gratia facti: Verg. Aen. iv. 539, vii. 232.

619-20. creatus : so I have written boldly for the trigono of MSS.
(cf. 627), otherwise retaining the text of the codd., 'those born under either of these signs do not spare the offspring of Aries but intermittently, as occasion demands, wage war against him.'

For parcere in cf. Lucr. vi. 399 neque parcit in hostis.
621. Bentley, followed by Breiter, \&c., athetizes this line. But it seems more reasonable to suppose with Jacob that we have here a genuine line in which pro tempore, accidentally repeated from the preceding line, has displaced the concluding words. I have conjecturally replaced pro tempore by quam iniuria, but cogit also should perhaps be altered (suadet would do).
623. quam te . . sub uno: quam in te qui sub uno (i. e. simplici, non bina, forma) es.
624. Should this line perhaps be transposed to follow 618? In its present place it is intolerably flat.
626. magis: sc. quam Leonis et Centauri et Arietis mentes; coeunt ad f. m.: Verg. Aen. xi. 292 coeant in foedera dextrae; Stat. Theb. i. 470 coeant animorum in pignora dextrae.

- 629. The MSS. offer quosque dabunt Chelae et quos dat Aquarius ortus; but since 63 I is found in no MSS. (apparently the creation of Bonincontrius), 629 -as it stands unmetrical-must have contained a mention of Gemini. Yet Jacob's correction (based on Bentley's quosque dabunt Gemini Chelaeque et $A$.ortus) is somewhat doubtful - though I have printed it-since instead of -que (quosque) an adversative particle is wanted. Perhaps set quos dant Chelae Geminique et A. ortus.

635. actus : perhaps not ' behaviour' but 'motion'. The word would be suitable to the quick motion of a fish or serpent, but hardly to the more dignified deportment of the crab.
636. sub nomine: 'character'; 16 et sub fratre uiri nomen.

643-92. It is not sufficient to regard the signs as self-contained and self-sufficient. The manner in which they distribute their degrees (parts of themselves) among one another is important. Signa quadrata, trigona, contraria, tertia have their peculiar powers and functions; but the mundus takes the functions of one region and transfers it to another. Quadrata preside over blood-relationship, trigona over friendship; neighbours are the care of uicina signa, guests of tertia. But you must over and above this give to each sign those parts of some other sign which belong to it of right. You must allow, that is, for the dodecatemories; and what these are I will now explain.

Any one who takes up the only convenient text of the Astronomica which exists-Breiter's-will find that Breiter has made the connexion of ideas in this somewhat difficult passage hopelessly obscure by making 686 end a paragraph. By so dividing the passage he has made what is, logically, only a parenthesis ( $652-86$ ) into the main theme of 643-86. No; the main theme from 643-749 is the dodecatemories; and the mention of the functions and powers of quadrata trigona, \&c., is only introduced preparatorily to explaining to the reader that these powers and functions are deducted from by the dodecatemories.

See note on 649-50.
-643. solis... signis: 'in isolation'; but neither that rendering nor the Latin saves Manilius from ambiguity. What he means is not really cleared up till 688 nihil in totum seruit sibi. No star is sufficient to itself; it borrows degrees or parts from other stars and gives degrees of its own in return. solis, therefore, is 'in isolation', but not 'in isolation' as opposed to conjunction in quadrata or trigona; the I 28
antithesis is between a star which is sufficient to itself and loses nothing of itself and a star which lends parts of itself and receives parts of other stars ; solis, that is, $=$ not singulis (as Du Fay) but indiuisis.
644. This line is proscribed by Bentley, Jacob, Breiter, \&c. ; and such a consensus of rejection is impressive. 'Weder templa caeli noch Planeten gehören hierher,' says Breiter, dogmatically. But whatever may be said of templa caeli (and locum caeli is not = templa caeli, but is far more general) I venture to think that the planets do very essentially 'hierher gehören'. In the preceding two notes I have tried to show, and in the notes that follow I shall try to make it clearer, that editors generally have not understood the connexion of ideas in 643-749 as a whole ; and that Breiter has misunderstood it more grievously than any one else. 643-5 introduce the dodecatemories (see next note) ; and with the dodecatemories the planets are very intimately connected, although Manilius does not introduce the subject of their influence till 738 sqq. and treats it there only in summary fashion, promising to return to the same theme later (750)-a promise, like many others, never fulfilled.
645. Scaliger, Du Fay, Stoeber, Pingré, Breiter have all, I think, misunderstood this line, and as a consequence the whole of what follows. parte is not =situ; but means quod partes suas aliis signis dant alienasque partes uicissim capiunt; lit. ' in respect of a part '.
uires linea mutat does not mean that the signs are different in their uires according as they are triangular, quadrangular, \&c. (so Scaliger, Breiter, \&c.), but it means that the linea (whether triangular, quadrangular, or what not) changes its powers-that is to say, the triangles, quadrangles, \&c., themselves change their powers-parte, owing to distribution, owing, as we shall presently see, to the dodecatemories ; cf. 856 sqq.

649-50. I have transposed these two lines so as to make them follow 645. In their present place they are-unemended-nonsensical. In 646-8 we are told that quadrangles, triangles, tertia signa, contraria all have their uires; then 649-50 'hence the mundus now gives to, now takes away from them, their strength, \&c.' What ? as a consequence of their being triangles, \&c., hence, on this account, do they lose their strength at one moment and get it at another? Nothing more untrue. They get and lose their strength owing, not to their being triangles, \&c., but to the dodecatemories, to the fact that parte genus uariant.

649-50 were the last lines of the verso of fol. 36 of our archetype ; see Introduction, pp. xxiii-iv. This circumstance lends strength to my conjecture that they ought to follow 645. If accidentally omitted after 645 (and uires being fifth word in each line might assist the omission), they would naturally be inserted as the last lines of a page. The spurious 651 stood in the lower margin of the same page. Now if the reader will turn to the table in the Introduction, p. xxiv, he will find (1) that 671-2 were also the last lines of a page (followed also by a spurious line 683 in the lower margin) ; (2) that this page was fol. 37 recto, i.e. the page which faced 36 verso. Before I was myself aware of this I had transposed 671-2 to follow 667 (as they stand in my text). If the first of these transpositions is correct, it confirms the other in a very striking manner. $649-50$ on the verso stood in one line with 671-2; and if we suppose that the scribe of $A$ copied not first the whole verso then the whole recto, but wrote continuously (i.e. the first line of the verso, then the first of the recto, then the second of the
verso, then the second of the recto, and so on), then if he accidentally transposed 649-50 to the extent of three lines he would necessarily at the same time transpose $67 \mathrm{I}-2$ to the same extent. The same phenomenon has apparently occurred at 342-4; see Introduction, p. xxiii, note 1 .

For further detail see note at 652-86.
But my transposition of 649-50 does not remove all our difficulties. The connexion of $643-5+649-50$ with 687 sqq . is clear enough. But 646-8 +652-86 serve only to loosen, if not to break, this connexion. Why precisely at this point this digression upon the province of quadrata, \&c. ? The passage $(646-8+652-86)$ is a self-contained whole which might as suitably be placed anywhere else in the book as here. It must, I think, be regarded as a wandering paragraph in a work which never received its author's ultima manus. Similar wandering paragraphs are to be found in 433-52, 453-65-with this difference that our present paragraph has wandered into a context where it obstructs the reasoning. The best that can be said for it in its present place has been said by Scaliger : trigona enim amicantia accessione maleficarum stellarum odium generant, et signum trigoni lege consideratum quadrati aut diametri lege alias uires habet, and this is the connexion which I have doubtfully suggested above; n. 643-92.

647-8. et (eis signis) quae per senos tractus, quaeque medium caelum tr. lim. secans, uirgula decurrit.
decurrit, 'traverses', with direct acc. (quae), as Catullus lxiv. 6 uada salsa . . . decurrere; Pan. Mess. 160.

In 648 I have written secans for the secant of $M L$, thereby giving, I think, coherence to a rather disordered construction; Verg. Aen. vii. 717 quosque secans infaustum interluit Allia nomen.
651. This line followed the last line of a page of the archetype (see above, 649-50, and Introduction, p. xxiv), and has no claim to consideration. surgat and subeat are one and the same thing. Breiter calls the line 'eine schlechte Nachahmung von i. 17I'-to which it bears not the slightest resemblance. It does resemble, however, Germ. Arat. 578 quod cadat aut surgat summoue feratur in orbe. The true reading in this line is perhaps 'distat enim surgatne cadens subeatne cadatque'. (By surgatne cadens the interpolator intended to distinguish the heliacal rising of a star.)
[At iii. 287 subeunt orbem = 'set' (apparently).]
652. quadratis: of course with censentur, not with cognata. cognata corpora, 'blood-relations'; corpora as 580.

652-86. Signa Quadrata govern relationship, Trigona friendship, Proxima neighbourhood.
$652-67+671-2+683-6+668-9$ : Cognati are the care of the cardinal signs; double signs guard Agnati; the simple signs guard Affines.

This is clearly what Manilius is trying to say in this perplexed passage. But three corrections have to be noted which I have admitted into the text. (I) Like every one else, save Bechert, I have followed Jacob in placing 683-6 before 673-82 (Manilius must finish his account of the squares before he begins to speak of the triangles). (2) By placing 670 after 663 we find the province of the second square ; it is ueluti cognata-a periphrasis for agnati. (3) I have assumed the loss of a line after 659-a line asserting the principle that cognati in the strict sense belong to the cardinal signs. (4) 668-9 sum up. more

Maniliano the whole of what has been said of the squares, and should therefore stand immediately before 673. For the reason of their trajection see note on 649-50. The cause of the trajection of 683-6 seems undiscoverable; so too that of 670.
659. Caper brumam genitusque ad frigora Piscis: Ellis rightly defends the text against Bentley's violent alteration. Capricorn is half goat, half fish; and Manilius, when he adds Piscis to Caper (which was intelligible alone) causam petit ex natura rerum cur frigidum brumae tempus Capricorno tribuatur; nimirum frigidissima est natura Piscium.
666. sine compare: so Dorville (with the genius of a better man) for sine corpore. Du Fay explains sine corpore by totus enim pes est. Scorpius. sine quoquam esse dicitur Scorpius argute, quod omni societate caret, Jacob; argutiae magis Iacobeae quam Manilianae! Ellis conjectures at Lucr. iv. 897 the same confusion corporecompare. [Ovid Met. vii. 830 metuit sine corpore-whence perhaps our text.]

- 672. una sub imagine natos: editors have either emended or misinterpreted these words through failure to perceive that the subject of signant is the signs of the third square. Du Fay, concealing his ignorance, renders by natos sub eadem similitudine; Jacob, not caring to conceal his, by ab eisdem maioribus natos. Breiter follows Jacob blindfold: 'wohl die Mitglieder eines und desselben Geschlechtes, welche gleiche imagines haben.' But Manilius is speaking of affines. Pompey and Caesar were affines, but they had not the same imagines, they were not 'eines und desselben Geschlechtes'.

At 188 Manilius speaks of Sagittarius as duplici formatus imagine. Similarly he might have spoken of e.g. Taurus as by contrast una formatus imagine. Intelligibly he might have gone on to speak of persons born under Taurus as una sub imagine natos. 670-1, then, mean that the square of the single signs Taurus, Leo, Scorpion, Sagittarius, 'guard affines and propinqui, protecting those born under single signs.'
sub imagine : Germ. Arat. 277, 354 ; Aetna 86 ; Ovid Met.ii. 37, iii. 250 ; Calpurn. iv. I43; Gratius Cyn. 326.
684. quae : the antecedent is simplicia signa (654), but by implication also signa duplici conexa figura (660).
669. numeris aut tempore: either as quarto quaeque loco posita merely, or as cardinal signs.
673. longior in spatium : what is here said is more clearly explained at 350-5.
675. The construction is haec ad amicitias imitantis iura gradumque sanguinis nos ducunt et ad pectora animis haerentia. The order is confused, but animis haerentia is in antithesis to genere coniuncta, as appears from 683-4; cf. pectore amicitiae in 582. Perhaps adque animis. pondera, Postgate coll. 956, v. 452; Prop. ii. 25.22.
678. maioribus: sc. quam ea interualla quae cognatos separant.

For the spondeiazon cf. v. 314 producitur interuallo; v. 412 rimabitur argumentis. maioribus interuallis is taken from Lucr. ii. 295, cf. iv. 187. Verg. Aen. v. 320 has proximus interuallo (Cramer).
679. putant : with a touch of scepticism (or pathos).
possunt: perhaps possint.
681. Signs which are next to one another aid neighbours, signs removed from one another by one sign guests.

Jacob (followed again blindfold by Breiter), removing the comma at subscribunt, takes proxima uicinis tertia quaeque as 'signs removed from one another by one sign, and which are therefore next door to being neighbours'. Surely, again, 'nicht ernst zu nehmen.'

It is notable that in 385-90 Manilius says there is no consensus between proxima, and in 572-6 that tertia are plerumque inimica. But the inconsistency is not perhaps considerable; a poet who believes so little in true friendship is not likely to put much faith in the ties of uicinitas and hospitium.
687. suas partes: logically inexact; Manilius means adde unicuique signo eas aliorum signorum partes quae proprio quodam iure sibi uindicat - 'those parts that are their due ', by the law of the dodecatemories.

Jacob takes partes as =factiones; and this is, he says, too obvious to need mention! At iii. 33 Manilius describes the system of dodecatemories by the phrase partes in partibus ipsis; and partes here means precisely 'dodecatemories', as is clear from sua partibus astra, in which phrase astra $=$ planetas and partibus $=$ dodecatemoriorum dodecatemorii (cf. 739 sqq.).
688. mixta : see n. on 749 .
689. fines : Bentley's note and emendation (uires) are a characteristic example of his petulant laziness. The fines are the fines of the dodecatemoria, as 699 his finibus esse dodecatemorium constat.
astris =planetis, as astra, 687 ; yet Breiter would have it that the planets 'gehören nicht hierher'.
692. I have preferred Bentley's dignoscere to Pingrés discernere (which Breiter receives), ( 1 ) as perhaps explaining poscis of $L M$, (2) owing to the doubtful Latinity of discernere with simple abl. Jacob's defence of perdiscere is nugatory. [At Verg. Georg. i. 351 for discere the Medicean offers noscere.]

693-721. What a dodecatemory is. Every sign has 30 degrees or parts. These are divided by 12 , and $\frac{30}{12}=2 \frac{1}{2}$; a dodecatemory consists of $2 \frac{1}{2}$ degrees of a sign. Thus every sign has in it 12 dodecatemories, and distributes these among the other signs of the Zodiac in this way: its first dodecatemory, its first $2 \frac{1}{2}$ parts, it keeps for itself; the second it gives to the sign that follows it, the third to the sign that follows that, and so on through the twelve signs. This mixtura accounts for the fact that the same sign produces diverse characters.
693. 'Go on to know a secret great in use but small in show' (Creech).
695. dodecatemoria : duodecatemoria, MSS. here, and constantly. But I think it certain that Manilius used the Greek form. Even in De Ave Phoenice 28, where editors keep dvodecies (so Seneca H.O. 1095 has quatvor), I would prefer to write dodecies.
700. bis senaque cuncta : tanta for cuncta, Housman-apparently not perceiving that bis sena is different from duodecim.

708 sqq.: very similarly iv. 373-9.
709. errant humana: the reading of $M$ and $L$ clearly points us to errant not errat; and on this and on $M$ 's matura ( $=$ mat'a) I have based the conjecture in the text (mata $=u m a n a)$. Something like this the sense requires, and the Manilian love of antithesis comes out in pecudes-humana, marem-femina. Cf. Lucr. iii. 760-1, Man. iv. Io1-2 (fatum) permiscet saepe ferarum corpora cum membris hominum.
maremque femina subsequitur: 'unter einem männlichen

Gestirn wird ein Weib geboren', Breiter, which is roughly correct. The Latin means '(under one and the same sign) a woman follows upon a man', i. e. there is born first a man and then a woman.

Stoeber, and others, misunderstand the passage. Saepe etiam monstrosos partus et androgynos facit, Stoeber, comparing-to prove the genuineness of 709-10-iv. Ior sqq., which Bentley had cited to prove their spuriousness.
710. sidere: Breiter retains the MSS. sidera, but he does not translate it and I cannot.
713. quot: here and at i. 4, 508, 509, iii. 70, 275, 390 , \&c., \&c., the preponderance of MS. evidence seems to point to quod as the form present in our archetype; and Mr. Housman actually here prints quod ( $=$ quot). quodannis for quotannis similarly is frequent in MSS. and Inscriptions. (But quot for quod in Inscriptions is as frequent as the converse ; cf. aliquit, aliut, set, \&c.) If Mr. Housman thinks that Manilius himself wrote quod for quot I can only say quod homines tod sententiae. I see not much more reason for printing quod at 713 than for printing ad qua at 929 or adque at 936 .
716. subeuntibus: i. q. sequentibus.
-720-1. summa repletur, \&c.: numerus absoluitur expletis triginta partibus in omni sidere, Du Fay; and to much the same effect Pingré.

No; sidere in omni is in contrast to in sidere quoque; the construction is summa repletur (the total is made up to 30) exactis eis $x \times x$ partibus quae in ceteris omnibus sunt sideribus.

722-37. Another method of finding the dodecatemory of a given sign.

The genius of Bentley in the correction of a desperate text is nowhere more clearly seen than in his treatment of this perplexed passage. He is the first editor to understand it ; and, stranger still, the last. Scaliger, it is true, claims to have restored the passage egregie. Nowhere is he louder in his own praise. Nos ipsimet in Ulympico stadio nos uictores praedicabimus, he says. Yet, save for the valuable correction quacumque in parti at 726, his much vaunted restoration, and with it his interpretation of the whole passage, is worthless. Huet justly points out that of the two rules which he makes Manilius lay down the first has no 'tail' and the second no 'head.' Yet Huet's own interpretation is as useless as Scaliger's. Du Fay, taking a hint from Scaliger, supplies after 729-in the shape of a signum lacunae-the 'tail' which was wanting to the first of the two rules. But he fails, though he shows some ingenuity, to find a 'head' for the second. Nothing could in fact be done for this passage so long as in 731 the impossible pariter sententia was left standing. Bentley (following Regiomontanus-see critical notes) with complete certainty corrected pariter(que) sententia to pariterque sequentia; and no subsequent editor-save only Bechert, and in the English-edited Corpus, a work dedicated 'to the manes of Bentley 'has had the hardihood to cast a doubt upon this correction. Bentley corrected pariter sententia. He also penetrated the meaning of 729-30, though his emendation of 730 is uncertain. (See note there.) And finally he triumphantly expelled from the text 732-4: Hi uersus et inepti sunt et barbari et falsi. He pointed out that there were three rules excogitated by the ancient astrologers for finding the dodecatemory of a given sign. The first is the rather cumbrous method expounded in 715-21. The second is as follows: Take in
any given sign the degree in which the moon stands at a birth; multiply the number of the degree by 12 . Distribute the result obtained among the signs, giving 30 to each sign-beginning with the sign in which the moon stands. The sign in which you are left with a remainder less than 30 is the sign in whose dodecatemory the moon is. Thus, if the moon be in the fourteenth degree of Aries : $14 \times 12=$ 168. Of this 168 Aries, Taurus, Gemini, Cancer, Leo each receive 30. In Virgo, therefore, you get a remainder less than 30. The moon, accordingly, is in the dodecatemory of Virgo. This method is the method expounded e.g. by Manilius' plagiarist Firmicus; and it exactly corresponds to the method followed by Manilius in 726-36 if we remove 732-4. It is simply expressed by $x \times \frac{12}{30}$ [but insert $732-4$ and you get $\frac{\text { Remainder of } x \times \frac{12}{30}}{2 \frac{1}{2}}$, which conducts us to a false and preposterous result].

This method is said by the scholiast upon Paulus Alexandrinus to be that of oi $\pi a \lambda a t o i$. It is followed not only by Firmicus and Paulus, but also by Dorotheus of Sidon. (Bouché-Leclercq, 300-1.) But there was in antiquity yet another method, found e.g. in 'Demophilus' (= pseudo-Porphyrius) (quoted by Scaliger), and followed, to the exclusion of any other, by Ptolemy. This consisted in taking the number of the degree in which, in any sign, the moon (or any planet) stood, dividing that number among the signs in order (beginning with the sign in which the moon is) so that each sign receives $2 \frac{1}{2}$. When this process of dividing by $2 \frac{1}{2}$ leaves you with a remainder less than $2 \frac{1}{2}$ there is the sign whose dodecatemory the moon occupies. The formula is $\frac{x}{2 \frac{1}{2}}$, a mere variation of $x \times \frac{12}{30}$. Now the formula $\frac{x}{2 \frac{1}{2}}$ is precisely that which 732-4 are trying to express. But inserted in the place and manner in which they have been inserted, the lines only produce complete confusion. Leave them there, and you get two different methods of producing an identical result combined together in one method to produce a wholly false and absurd result. They perform twice an operation which requires to be performed only once, though it may be performed in two different ways. They are, in fact, the work of some interpolator or annotator who missed in Manilius the method of Ptolemy, or 'Demophilus', with which he was familiar. The fact that the lines are not represented in the reproduction of Firmicus is in itself some presumption against their genuineness.

Bentley's position is put by him so clearly and forcibly that it might well have been thought that no one could miss its cogency. Yet Jacob, Bechert, and Breiter, following upon Bentley, have one and all utterly misunderstood the passage. Bechert's position may be allowed the merit of inscrutability. But Jacob and Breiter remain in regions where they are still open to refutation. Both of them accept Bentley's correction of 731. They are thus obliged to assume, as against Scaliger, Du Fay, Bechert, \&c., that 726-36 are all part of a single calculation. The result in Jacob's case is that he takes the degree $(x)$ in which the moon stands; he multiplies this by 12 and gives, from the result, 30 to each sign; when he is left with a remainder less than 30 he takes this remainder and gives from it $2 \frac{1}{2}$ to each of the remaining signs. He finds the dodecatemory of the moon
in the sign in which he is left with a remainder less than $2 \frac{1}{2}$. He is thus led to the extraordinary result that if the moon is in the ninth degree of Aries, it is the dodecatemory of Aquarius! It is, of course, in the dodecatemory of Cancer.

Breiter, by a method of calculation considerably more involved, arrives at a result equally false and absurd. He multiplies by 12 the number of the degree in which the moon stands. He then allows to the sign in which the moon is, not 30 , but 30 minus the number of the degree in which the moon is. To each following sign he allows 30. When he reaches a remainder less than 30 , he distributes this remainder in portions of $2 \frac{1}{2}$ to each of the remaining signs. Thus, assuming the moon to be in the tenth degree of Aries, he locates it as in the dodecatemory of Sagittarius! And having done this he gravely rebukes Firmicus for misunderstanding lines 729-30, and mourns that Bouché-Leclercq should have thought Manilius capable of a Rechenfehler. His own calculations constitute something more than a mere Rechenfehler.
723. pluribus inque modis: cf. iv. 364 in pluresque modos. For the position of -que Cramer compares i. 11, 808, iv. 269, 682 (De Man.El., p. 34), but not one of these examples is in point.
natura: 'la nature endosse tout ce qu'il plaît aux astrologues d'imaginer,' Bouché-Leclercq, p. 303.
724. woluit .. . quaeri : i. e. uoluit se quaeri ; just as the deus is said at 108 se ipse requirere.
726. parti $=$ parte, as i. 779, iii. 395. Cf. igni 56, i. 832, iv. 384, 498 (in other writers, orbi, Lucr. v. 747 ; parti, iii. 611).
727. numeris hanc ter dispone quaternis : hanc = hanc partem, or rather huius partis numerum; not as Ellis, lunam, put loosely for pars in qua luna constitit (Ellis reads partu in 726) : ' multiply this number by 12 '.
730. tqua et hunc defuerant $\dagger$. I cannot think Bentley's attempted correction of these words (which already appears in the codd. dett.) satisfactory, though all subsequent editors have accepted it (save perhaps Stoeber, who seems uncertain). Those who accept it are not, indeed, wholly agreed as to how it should be translated. Bentley takes suas in 729 as the number of degrees which the moon has already traversed in a given sign, and quaeque hinc defuerant as the number still to be traversed. So too Pingré and Jacob. But (1) it is difficult to think that suas partes can mean anything but the 30 degrees proper to each sign; (2) it is in any case strange (whatever the number involved) that the degrees which the moon has traversed should be said to belong to the sign : it would even be more natural to say that they belonged to the moon; (3) why should Manilius employ this obscure rigmarole in order to say what could be simply said by triginta partes (or suas partes, without addition of any kind)?

Nor can it be thought that Bentley's suggestion is palaeographically attractive. Breiter renders the lines as emended by Bentley in quite a new way. 'Luna stehe in $Y 10^{\circ}$ : multipliziert mit 12 (727) sind 120 partes. Gib dem Aries erstens seine 10 Teile (729) und (730) die Teile, die von $10^{\circ}$ ab noch fehlen (this would need defierint, of course), so dass er im ganzen $30^{\circ}$ erhält, also 20 partes : bleiben 100 Teile.' German is not my native tongue, and I may do Breiter an injustice. But I have never seen a sentence which expressed more confusedly what its writer was trying to say than this. What Breiter means is: Reckon Aries as having 10 degrees already; then give him, out of
your 120, suas partes $=10$ degrees (this would require aequam partem ei parti quam iam habet): he thus has 20 degrees, though you have only given him 10 of your 120; give him another 10: he thus has 30 and you are left with 100 . This interpretation is, of course, impossible as a rendering of the Latin, and leads us to a false result at 735. I notice it in order to point out to any one who still believes in $732-4$ that the false result at 735 would be avoided by excising, or emending, the word reliquis in 734 (signis will then be Aries and the signs following; and the method will involve doing the same sum twice over).

Mr. A. L. Dixon has suggested to me 'quaeue hinc defuerint' (defuerint iam codd. dett.). He then understands 'Give to the sign . . . its own (30) degrees, or any number less than thirty which $x \times 12$ may yield you.' The words quaeue hinc defuerint are, he thinks, put in to provide for cases where the moon is in the first or second degree of a sign-i. e. in the dodecatemory of the sign in which it stands. My principal doubt here is whether quae defuerint can bear the meaning suggested.

Ellis' quae et dehinc defuerant is open to the same objections as Bentley's emendation. But his note is valuable for the parallel which it cites from the so-called $\Delta \eta \mu$ ккрírov $\sigma \phi a \hat{\rho} \rho a$ (Dieterich, p. 813):
 $\pi \epsilon \rho \stackrel{\lambda \epsilon \iota \pi \delta ́ \mu \in v a ~ \tau o v ̂ ~ a ̉ p ı}{ } \theta \mu \mathrm{ov}$.

I have thought it best to obelize tqua et hunc defuerant $\dagger$. Taking suas as $=\mathrm{xxx}$, the text gives the required sense without the additional words. See further upon 736-7.
735. eius tum : so Bentley for MSS. te iustum. It is strange that this correction was not made earlier, when editors had no better interpretation to offer of te iustum than Bonincontrius' luna widebit te iustum partitorem.
736-7. Postea luna ducet cetera dodecatemoria pro stato ordine signorum, Bentley.

Breiter takes astra as = planetas: 'aber Luna führt mit sich die fünf Planeten-astra hier Planeten, denn Luna kann nur Planeten anfuihren', from which it seems also that he takes cetera as = cetera astra. So Creech, 'the following planets lie in following twelfths and there enjoy the sky'; and so Du Fay. But the other planets have nothing to do here. The moon has been taken exempli causa; any planet would have served as well; and to repeat the test with all seven seems needless. quoque: cf. 661 quartum quemque locum retinent.
ducet : apparently as 743 ducunt sortes.
Bouché-Leclercq charges Manilius in this passage with two gross blunders: (1) He imagines him at 726-31 and 732-4 to be versifying two distinct methods given in his source under the impression that together they constituted a single method. Bouché-Leclercq is throughout his book very unfair to Manilius, and this particular charge arises from a defect in his work which is everywhere apparent-he has not read, or not read with care, Bentley. (2) He says that Manilius, when he contemplates the case of a planet standing in some other degree than the first (e.g. $5^{\circ}$ ), throws his calculations into confusion by beginning the distribution mentioned in 729-31 at the first and not the fifth degree of the sign in which the planet stands. This error is, as he says, justly chargeable to Firmicus. But I am not clear, in the uncertain condition of our text, that it is chargeable to Manilius, and

I think that 730 (though I have not attempted to restore the line) may have been inserted to guard against this very error. (The same suggestion is made in Bonincontrius.)

738-49. What is meant by the 'dodecatemory of a dodecatemory'.
'Learn in brief what it is that is called the dodecatemory of a dodecatemory. For the dodecatemory ( $i d$ ) is distinguished into five parts (half-degrees), for such is the number of the so-called planets that shine pre-eminent in heaven; and each planet takes to itself a half-degree, and in it exercises sway and influence. We must note therefore in what dodecatemory the planets are at any moment stationed. For in any sign, within the confines of whatever dodecatemory a planet has entered, that planet will work powerful results in the influences of that dodecatemory.'

In other words a dodecatemorion dodecatemorii is the fifth part of a dodecatemory-the five half-degrees of each dodecatemory being assigned among the five planets.

The dodecatemorii dodecatemorion is peculiar to Manilius, nor is his account of it reproduced in Firmicus. As a consequence a good deal of controversy has arisen round these twelve lines -most of which does not admit of a settlement. Breiter wishes to get rid of the dodecatemorii dodecatemorion altogether, and to this end he pronounces the whole of 740 from quid . . to 743 . . . dicuntur the work of an interpolator. This suggestion-textually highly arbitrary-is rightly said by Bouché-Leclercq to be in itself useless. Yet Bouché-Leclercq's own treatment of the passage is almost as unsatisfactory. He imagines Manilius-if I understand him aright-(I) to have interpreted the planetary öpta or termini (for which see e.g. Du Fay's tables ad loc.) as being each one-sixtieth of a sign; and (2) to have confused dodecatemory in the sense of a sign, a twelfth of the Zodiacal Circle (for this sense see e.g. Geminus, chap. i), with dodecatemory in the sense of one-twelfth of a sign.

The answer to all this is that nothing in Manilius' account of the dodecatemorii dodecatemorion (so far as it goes) is in the least degree confused or obscure. All, for what it is worth, is clear and explicit. In fact the only real difficulty that arises is one which seems to have been made for, and not by, Manilius. Why is the dodecatemorii dodecatemorion so called? Why not rather dodecatemorii pempte-merion?-for that is what it is. The phrase occurs only at 741, and it is not certain that the text is sound; for the words namque id per quinque notatur partes seem to imply that Manilius had written not dodecatemorion but pemptemorion. Something like (740-1) 'dodecatemorii quota sit (quod codd., cf. 713) quod dicitur esse pars pemptemorion' is, perhaps, just possible (=quota pars (signi) sit (id) quod dicitur esse dodecatemorii pemptemorion).
$738-40$ (739). I am surprised that it has occurred to no previous editor to remove 739 from its present place. It followed the last line of a page in our archetype, cf. Introduction, p. xxiv (this no doubt assisted the transposition in $M$ of 740 and 741), and its removal at once gives sense to the lines which it separates. I have transferred it to a place after 822, where see note.
740. dodecatemorii : Bentley pointed out that only here (studii in iv. 123 should be studia et) does Manilius use the double - $i$ form in the genitives of substantives in -ius, and -ium; and he saw in this an indication that Manilius falls within the Augustan age and influence. Bentley thought it possible that Manilius actually wrote
here dodecatemoriu-the Greek form, as Livy xxxviii. 13. II Gordiutichos. But it is to be noted that authors who otherwise eschew the genitive in -ii occasionally permit it to themselves in Greek words; as Verg. Aen. ix. 151 Palladii (if the line be genuine), a solitary example, since fluuii in Aen. iii. $702=$ fluuji, cf. Georg. i. 482 fluujorum-Mart. xi. 27. 3 (31. 14) cybii, but elsewhere always the single $-i$ form. But the facts with regard to Manilius may easily be misrepresented. He has dodecatemorii here. But how many examples are there of the single $-i$ form? Two only-in the words Aquari, Sagittari (which Cic. Arat. also uses). These are of frequent occurrence (e. g. 211,$280 ; 464,505$ alibi), but the phenomenon is confined to these two words. It might reasonably be said, therefore, that Manilius employs the $-i$ form only when driven to it by the exigency of metrefor Aquarii, Sagittarii are impossible in dactylic verse. Ovid, to whom Manilius stands nearer than to any other poet, frequently affects the $-i$ form. [Man. iii. 92 talis et illius sors est speranda negoti is rightly obelized by Breiter, who omits, however, to remark upon the form of the genitive.]

It seems worth while-since the authority of Lachmann's note at Lucr. v. 1006 has so long been paramount-to define here clearly the usage of the Latin poets as between $-i i$ and $-i$. The form in $-i$ may be regarded as universal in the earliest poets, Ennius, Plautus, and Terence. It is maintained consistently in Lucretius (save perhaps $\mathbf{v}$. 1006, vi. 743), Catullus (save perhaps ix. 5), Horace, Tibullus and Vergil. In Horace and Vergil it may perhaps be regarded as a conscious archaism. Outside these poets the form in -ii is admitted freely, save in Persius and Martial, who revert to $-i$. But even they confine their use of $-i$ almost exclusively to proper names. In view of Persius and Martial it would in any case be temerarious to argue from the usage of Manilius in this matter an Augustan date. And indeed the employment of the $-i$ form is not strictly Augustan. Like so much else in Vergil and Horace it is a survival from the Republican period.
747-8. I have followed Bentley in reading stella (so too Breiter) for stellae. Bentley further alters in (748) to pro, and renders cuius enim dodecatemorii in fines stella inciderit, dabit illud effectus suos pro uiribus eius stellae.
cuius, then =cuius dodecatemorii ; but dodecatemorion can hardly be, as Bentley takes it, the subject of dabit. The subject of dabit is stella; the planet will produce effects in the uires of the dodecatemory. The dodecatemory has uires of its own; these are modified by the accession of a planet.

Ellis, reading stella $e$ in fines sub, renders: 'In the region of whatever planet the dodecatemory under any sign falls, that planet will exercise results on the workings of that dodecatemory.' sub is already found in Regiomontanus; and no doubt the thrice repeated in is awkward. But the rendering is open to the objection that, with it, the dodecatemory is said to fall in the planet, whereas at $645-6$ the planet falls in the dodecatemory.

To the reading stellae a powerful objection, to my mind, is the fact that there are in the whole of Manilius only two decently attested examples of the elision of the last syllable of a spondaic word. These are iv. 923 paruo in corpore, v. 477 uitae ostendit. Either of these might suffice to justify stellae here if there were no reasonable alternative. But neither can when there is. Illusory examples are 826 (see
note), i. 332 (read cingentem with Breiter, \&c.), iv. 445 read illi est. The elision of sese at iv. 83I, v. 198 is really elision of se. At v. 656 the true reading is past recovery.

Of mediate syllables elided in disyllabic words only two examples are alleged. Of those no one will defend enim an at ii. 347. At i. 90 I am inclined to suggest semper ut. Ergŏ, uerŏ, quandŏ are regarded by Manilius as trochees. Similarly leŏ et at ii. 229 (the normal scansion in Manilius).

The whole subject of the elision of long syllables in Latin poets generally needs complete re-investigation. In the Journal of Philo$\log y, 1906, \mathrm{pp} .90-4$, I have tried to show how utterly erroneous are current views upon the subject as far as hendecasyllabic verse is concerned. In the Classical Quarterly, 1910, pp. 121-2, I have tried to correct inadequate ideas on the elision of the last syllable of a pure iambic word (in the dactylic and tragic poets). I may be allowed here, perhaps, to call attention to certain broad principles governing the elision in Latin poetry of long and mediate syllables.

The Roman poets avoid the elision of a long, or mediate, syllable save (1) before a monosyllable; (2) before a word of which the first syllable is, or has the appearance of, a monosyllabic preposition, as e. g. emitto, insignis; in this class may also be reckoned such words as amplexus, optatus, antiquus; (3) when the syllable elided is itself a monosyllabic word; (4) when either colliding syllable is a particle, conjunction, preposition, pronoun, or other word in very common use in daily speech, as e.g. hic, ille, ipse, is, ego, idem, alius, aliquis, alter, \&c., and their parts; age, equidem, enim, etiam, adeo, inter, ubi, autem, \&c. ; unus, omnis; uerum, tantum, solum, certe, quando, supra, frustra. To these must be added a few very common substantives, as e. g. in Vergil homines, oculus, animus; (5) when either colliding word is a proper name. Vergil delights in this kind of elision, and his pleasure in it is notable, since in all our other four cases the elision is apparently conditioned by the slurring in ordinary pronunciation of very common words.

Elisions not covered by these cases will be found, I fancy, extremely few. In Vergil I have noted in the Eclogues but 5 exceptions; in Georg. i. 7, in Aen. i. 9, in Aen. ii. 14, in Aen. xii. 14 (nearly always $-i-o-a e$, very rarely $-u-\hat{e}-\hat{a}$ ); in Ciris 3 ; in Culex o; in Cicero, Arat. 3 ; in Catullus (hexameters) 4 (? 5). Even in Lucretius I fancy that the percentage is only about two exceptions in 100 lines. It is, moreover, noteworthy that these exceptions (particularly is this true of Vergil) are most frequent where the two colliding words form one phrase (e. g. longo ordine, ferri acies). The long vowel oftenest elided is, I fancy, $-i$. The figures which I have given do not pretend to be more than approximately accurate; but I offer them in the hope that some one may be stimulated to produce lists at once fuller and more exact ; and in order to call attention to the fact that what has above all to be considered upon the subject of elision is the character of the colliding words. Elision is just a slurring of pronunciation; and with the Latins, as with us, such slurring is commonest in the case of words' in familiar use.
749. undique miscenda est ratio: usus est proprio artis uerbo, says Scaliger, comparing iii. 583-4 mox ueniet mixtura suis cum uiribus omnis cum bene materies fuerit praecognita rerum. But quid sit miscere rationem nescio, says Bentley, proposing ducenda. Stoeber cites Firmicus ii. 21 fin., which is a good parallel to everything in our
passage save 'rationem miscere'. (For the same technical sense of miscere see Firm. ii. 1 init., ii. 8. 4.) Bentley is refuted by the fact (strangely not hitherto adduced) that Quintilian (Praef. 23) uses rationem admiscere exactly as Manilius here uses rat. misc.; cf. diuidenda est ratio corum Quint. xi. I. 15; and see ib. iii. 6. 55.
$750-87$. We must begin with elements. We must get the material for our building before we build. On this passage is modelled the whole of Firmicus i. iv. 12-13, Kroll, p. 14.
756. usus: 'Aussprache', Breiter; why I know not. Manilius simply says, 'You teach a child the appearance and forms of letters first, and put the use of them before him afterwards. tum ponitur usus is no more than priusquam ponitur usus; it expresses in a brief general way what is said with detail in the two succeeding lines. It does not mark a stage between facies-et-nomen and syllaba, structura, \&c.
757. suis syllaba nodis: 'das Verknüpfen der Laute', says Breiter. But it is, I think, possible that the child is being taught writing (as well as reading ?), see on 760 ; nodi will there be 'pothooks and hangers'. (Scaliger compares Auson. Ep. xxi. 38 trinodem dactylum.)
758. 'Then comes the building of words which have to be bound together through their parts.'
membra : Scaliger (and Bentley) for uerba which Breiter retains; here $=$ syllabas. [At Verg. Aen. x. 639 there is the same confusion of membra and uerba in the excellent Codex Gudianus, at Juv. x. 198 membra $P$; uerba $L$.]
ligandis is my own correction for legendi. Breiter's ( $=\mathrm{F}$. Junius) legenti (sc. puero) I take to be not Latin ; to 'read through' is not legere per. For ligandis cf. Stat. Th. v. 613-14 ubi uerba ligatis imperfecta sonis? Censorinus x. 5 litterae nostrae . . . saepe nec uerbis nec syllabis copulandis concordabunt.
759. rerum uires: the possibilities of his material.
760. First the child learns the forms, \&c., of single letters; he next connects into syllables, suis nodis; then he binds a whole word together per membra. When he can write (or read) whole words he proceeds to the final cause of all this, to the art of writing (or speaking) in its highest manifestation-artistic writing, poetry. Cf. Plato Prot. 324-6.
-764-3. I have with some hesitation accepted Breiter's transposition of these two lines, and the old correction in 764 effluat for $e t(u t)$ fuat. Ellis (with the traditional order) retains et fuat, for uersaque quae proposing ingeniously uertas quae. Jacob retaining uersaque (with effluat) makes it =et si uersa erunt; quod durius fortasse nonnullis uidebitur', as Ellis says suavely.
768. 'Recalling by the methods of science the power by which the god rules.' Scaliger reads quaque ...ab arce; and so Bentley 'calling divinity from the height where the god reigns'. artem Immisch, which Housman (C.R. xiv, pp. 466 sq. ) pronounces 'certain'.
769. per partes: i. q. gradibus in 770 : 'the faith of the learner must be led on, line upon line'; first the parts, then the whole.
775. quaerit opes: so I have written for uertit opus. Querit losing its initial $=$ uerit, which became inevitably uertit. opus and opes are confused again at iv. 169. Breiter retains uertit and comments: 'er ändert das Werk, indem er lauter Vorbereiten anordnet, Material schafft.' How can he 'ändern das Werk' before he has begun it ?

Note，too，that＇Material schafft＇exactly renders my quaerit opes． （Breiter might perhaps have troubled to quote v．501－2 mille figuris uertere opus．）Bentley reads uersat opus：＇mente，anima，consilio．＇ Ellis＇feruit opus，which is near and neat，involves a parenthesis which would be more suitable in the middle，than at the beginning，of the description of the preparations．
-778 ．antiquasque domos：Verg．Georg．ii．209，Aen．ii． 635.
780．ferrique rigor：the phrase is taken from Verg．Georg．i．143， who models it upon Lucr．i． 492 rigor auri．per tempora nota： ＇Mire dixit tempora ferri pro temperamentis，＇Scaliger，truly．In ed． 2 he suppresses the expression of surprise，and compares the use of tempore at 430－defending a hazardous interpretation by one quite impossible．I have followed Scaliger－and most editors－in my rendering．But I have little doubt that the text is utterly at fault． tempora nota is，I think，a corruption of temperamenta．The word rigor was glossed by temperamenta，and this unmetrical gloss（subse－ quently metricised）usurped the place of－we may conjecture－an original uiscera terrae．（So Ovid Met．i． 138 itum est in uiscera terrae，of mining．）

Du Fay renders by per certum temporis spatium．Stoeber inter－ prets tempora as＝regiones．

784．cunctanti ：tentanti would，perhaps，be nearer than Markland＇s conanti．Ellis＇captanti is based on the（in）tractanti of codd．dett．

787．stupeant：sub．homines，lectores．For stupeo with acc．cf． Verg．Aen．ii．31 stupet ．．．donum exitiale：Seneca Thyest．815－18．
 Hor．791－2；（2）Occasus，סívıs，O．C．C．793－4；（3）Medium Caeli， $\mu \in \sigma о v \rho a ́ \nu \eta \mu a$, М．С．794－7 ；（4）Imum Caeli，àvтı $\mu \in \sigma о v \rho a ́ \nu \eta \mu a, ~ \mu \epsilon \sigma о v \rho a ́ v \eta \mu に ~$ ívò $\gamma \boldsymbol{\eta} \nu$ ，ímó $\epsilon \epsilon \iota \nu$, I．M．С．798－800．

In 808 sqq ．Manilius prefers to speak of the $\kappa \in \in \nu \tau \rho a$ in a different order，viz． $3,4,1,2$ ，giving the primacy to the M．C．as the fastigium， and then passing to the other end of the diameter．Here，on the threshold of the subject，the Horoscope takes precedence as the deter－ minant of all the other кév $\varepsilon \rho a$ ．

From 788 to the end of Book II we exchange the Zodiacal Circle， with which we have hitherto been concerned，for the Circle of Geni－ ture ${ }^{1}$ ．It is the same Circle only with an independent constitution． It has its twelve＇places＇independent of the Zodiacal dodecatemories， and its own distribution of planetary influences．And whereas the Zodiacal signs are fixed once and for all，the＇dodecatemories＇of the Circle of Geniture are different for each birth．In relation to the earth， however，the Circle of Geniture is steadfast，that of the Zodiac in motion．The Circle of Geniture is＇a kind of unmoving framework in the interior of which revolves the Zodiac and the whole cosmic machine＇（Bouché－Leclercq，p．257）．The Horoscope is nothing more than that point on the Zodiacal Circle which，at the moment of a par－ ticular birth，is＇being born＇，i．e．is rising，on to the horizon（caeli nascentis in orbem，791）．The other points O．C．C．，M．C．，I．M．C． are determined by their relation to the Hor．Manilius，like Ptolemy and Paulus Alexandrinus，makes the M．C．correspond with the South， the I．M．C．with the North，and so on．

790．mutantque ．．signa，＇speed the different signs in their courses one after another＇；they＇change the flying signs＇in the sense

[^115]that now one sign flies through them, anon another (not varry the influences of the signs').
791. ab exortu: sc. respondens (793) alteri.
caeli nascentis in orbem : caeli, i. q. Signiferi; orbem, i. q. orbem terrarum.
794. mundus: 'les astres', Pingré, correctly.
in Tartara tendit: Verg. Georg. ii. 292, Aen. iv. 446.
795. fastigia : uestigia, codd., by a common blunder, which Breiter defends; cf. 813.
796. subsistit anhelis: for anhelis (Scaliger) all MSS. have habenis. I cannot find that any one has adduced Verg. Aen. xii. 622 adductisque amens subsistit habenis. But this is clearly, I think, the source of the corruption. For other corrupions in Latin texts arising out of reminiscences of Vergil see my Preface to Statius Thebais, p. xi, with Klotz's comments thereon, Klotz, p. lxviii.
797. declinatque: 'starts' the day on its downward path. quomodo declinat qui in ipso fastigio est? asks Bentley; and the same difficulty leads Housman to the ingenious conjecture reclinatque, 'rests the day at the siesta '. But both Bentley and his idolater are overhasty. The superior culmination is at once the end of the upward and the beginning of the downward path. It was precisely because the M. C. declinat diem that Dorotheus of Sidon and others refused it the primacy among the $\kappa^{\kappa} \nu \tau \rho \rho$; see Bouché-Leclercq, pp. 27I-2. So conversely 799 the I. M. C. is principium reditus finisque cadendi; while 918-19 are decisive.
mediasque examinat horas: i. 633 sextamque examinat horam; ii. 920 suspenduntque suo libratum examine mundum. Ovid Fast. i. 459 hiemem medio discrimine signat.

The picture here is taken from the sun-dial.
800. pariterque : as aequali limite, 792.
803. orbis: the whole heavenly sphere, and not, as Breiter, the Zodiac. The Zodiac cannot be said to have latera (806).
804. quem : quem orbem (quae codd.).
-808-40. These cardines rule different provinces of our lives. The M. C. presides over all that pertains to glory, sovereignty, \&c. (810-19) ; the I. M. C. over wealth, mines, \&c. (820-5) ; the Hor. over safety, character, fortune, arts $(826-35)$; the O . C. C. over all kinds of consummations-marriage, banquets, old age, rest, religion (836-40).
809. 'And they are different (in their powers) according as they are placed (pro sorte loci) and according to the order in which they are separated from one another.'

For atque, which I do not understand, I have written utque. Of course the cardines 'ordine distant'; but Manilius is now speaking of the effects that arise from this. [At iv. 361-2 utque orbe feruntur extremo (atque codd.).]
uariant : neut., as often.
814-15. 'Whatsoever is of a kind to claim for itself pre-eminence, to arrogate glory and to reign by lavish distribution of honours.'
decus: deus codd. Conversely at Verg. Aen. viii. 301 deus for decus Bentley, with plausibility; so Culex 342 deus $=$ decus.
817. reddere iura: for my rendering cf. L. \& S. s. v. reddo.

817-18. reddere . . . componere . . .iungere : 'infinitive as apposition to the subject'; cf. iv. 244 (Cramer, Der Infin. bei M., p. 69).
819. et uniuscuiusque hominis nomen extollere prout sortem eius decet. sua, in fact, is not here reflexive, but belongs to cuiusque.
820. proximus : next in eminence or importance.
extrema: so I have altered est ima, not only because the trajection of est is very harsh, but because proximus extrema gives a true, proximus ima at most a clumsy antithesis: 'next to, though furthest from.' extrema means, of course, furthest from the $\mu \in \sigma o v \rho a \dot{\nu \eta \mu a \text {, and }}$ only so ima.
822. 'Its influence is less in outward show, but greater in practical utility'-for the ordinary work of the world. The foundations are never as fair in specie as the superstructure, but they alone are indispensable.

After this line I have inserted 739-on which see note above. 'Greater in its influence is that which is less (in outward show), for the reason that, by the very region it occupies (partibus ipsis), it controls the foundations of things and governs wealth.'

824-8. Obelized by Bentley and Pingré; but some amplification of fundamenta...censusque in 823 seems necessary. 'lt examines, when mines have been dug, how far hopes have been ratified, and how much you may win out of the hidden (undug) wealth of the earth.'
826. aequali pollens in parte: 'mächtig in der gleichen Stellung, nämlich als cardo,' Breiter, wrongly. Housman also, when he accepts aeque illi pollens, has not understood the passage, and the elision is un-Manilian; see note on 747. The Exortus is said to be aequali pollens in parte because it is neither $\mu \in \sigma o v \rho a ́ \nu \eta \mu a$ nor ávтсцєбоvрávŋ $\mu a$ (neither top nor bottom), but terras aequali limite cernit (792): not merely because it is a cardo (Breiter), but just because it is Exortus. The blunder atque illi for aequali occurs also at 233.
828. discribit, 'apportions': the subj. is dies. The MSS. offer describet; the correction is due to Bechert, though describit is already given in all the early editions.
829. hinc: sc. quia tempus in horas discribit.
831. hunc penes arbitrium uitae est : this correction (Housman) is, I think, more satisfactory than any other. hic tenet ... uitae. hic involves a hiatus not credible in Manilius (yet so Pingré, Jacob); uitae atque hic (edd. uett.) is more than crude, and so is Bentley's uitar hic. Breiter's nunc . . . nunc, giving as it does a false sense, is merely slipshod.
832. fortunam: i.q. successum; not the element of chance-for ducet per artes-but 'happy issue'.
833. qualiaque excipiant : subaud. dabit.
834. cultus, 'education'; sede, 'station of life.'
835. utcumque : prout bene uel male subscribent, Bentley, rightly; comparing iii. 119 utcumque regunt dominantia sidera, paret; iii. 128 si male subscribent stellae per signa locatae. But Pingré mistranslates, though Du Fay, whose inaccuracy he censures, is right enough.
astra : planetae.
839. coniugia: the O. C. C. is called yaبoбтó久os tótos in Paulus Alexandrinus (Scaliger), Brit. Mus. Pap. CX., Anon. p. 139 (BouchéLeclercq, p. 273 n.). Breiter cites Firmicus ii. 8 ex hoc loco qualitatem et quantitatem (a touch of humour, here!) quaeramus nuptiarum.
extremaque tempora uitae: cf. Lucan vii. 380-1 ultima fata deprecor et turpis extremi cardinis annos.
840. coetus : coitus, Bonincontrius.

841-55. It is not enough to observe the кévt $\rho a$, cardines; the $\mu \in \sigma o^{\circ}-$

кevtpa, interualla cardinum, the spaces between the cardines, are also of importance.

The four quadrants enumerated correspond to the four ages of man.
843. per maius dimensa : Si interrogas quo sensu accipiant per maius nihil respondebunt, Bentley, who writes per quadrum. Manilius, says merely that the interualla are 'measured out over a wider area' (maius spatium understood out of interualla) than the cardines themselves; 'bestowing their influences in a wider extension than that of the cardines.' See note on 864 sqq.

844-5. curuatur: not only because we are following a rise, but because we are following the Circle of Geniture.

The interuallum between Hor. and M.C. controls the earliest years of life.
846-8. The interuallum between M. C. and I. M. C. controls boyhood and early youth.

849-51. quae pars occasu contermina quaeque: I have here followed the more sincere tradition of $M$, which for the inter imum of $G L$ has interminum, pointing clearly to contermin-. The interuallum which bordering on the O.C.C. also descends sub orbem - to the I.M.C. -governs mature life. occasu contermina is simply the iuncta sub occasu of 868. The quae pars . . . quaeque anticipates the subdivision of the interuallum in the later passage.
-851. et propria serie uarioque, \&c. Nec coniunctio et locum hic habet: nec propria serie quid sit quisquam explicauerit, Bentley, who changes et propria to perpetua. His criticism has force, if his correction has not persuasiveness. Pingré paraphrases, 'lầge mûr, que fortifient le passé même et les leçons réitérées de l'expérience', drawing on both Du Fay and his own imagination. Perhaps set propior serae.
852. redeuntis ab imo: so Ellis, truly, for redeunte sub imo. 'redeunte sub imo: substantiviert,' says Breiter, with a perception of Latin shadowy rather than substantive. 'Beispiele bei Jacob', he adds; 'wo allerlei Unsinn vorkommt', we might rejoin.

Bentley's quadrante sub imo - which Pingré receives-has nothing to recommend it, and would indeed be hardly intelligible. (The word occurs only-and in a different sense-at iii. 284.) Housman's redeunte sibimet I cannot understand.

The interuallum between I. M. C. and Hor. governs the last years of life.

856-63. Every sign receives and transmits the influence of the partes mundi (the partes mundi are the duodecim loci which he is going to enumerate; hence locus in 857).
857. inficitur: cf. 357 (uisus signorum) aera infectum demittit.
astris: probably here not 'planets'; cf. 959-60.
859. caeloque remittunt: Bentley pronounces caelo 'ignaue dictum'. It probably means no more than partibus mundi.
860. mundi etenim natura : uincit ( $=$ uindi) enim natura codd., which, as Jacob (conj. positura) and Ellis (conj. mensura) have perceived, cannot be sound. (Editors interpret as loci natura, betraying thereby an uneasiness which they do not openly express.) [mundi natura, Lucr. v. 239.]

The subject of ministrat is not merely mundi natura, but mundi natura nunc diues honore nunc sterilis-qualifying epithets which hardly suit positura or mensura.
861-2. et sidera propriis in finibus praetereuntia sui esse moris
cogit. The mundi natura has no fines proprii-its fines are every-where-but the signs have.
863. poenam referentia : poenamque ferentia codd. Similarly at Seneca Med. 366 regnum referens (codd.) for regnumque ferens (Madvig).
864-970. Manilius has spoken of the four cardines, and of the four interualla which separate them from one another. He now proceeds, dividing each of the four interualla into two regiones (é $\pi$ avaфopá and émıкатафора́ (ả $\pi$ óк $\lambda \iota \mu a)$ ), and reckoning each cardo as one regio, to explain which of the different regiones are fortunate, and which unfortunate ; and, again, which deities preside in each.

From 864-917 Manilius speaks of the eight regiones of the interualla ; and from 918-70 of the four regiones of the cardines themselves. Breiter holds that these four regiones of the cardines are nothing more than the four cardinal points themselves. It is clear (from 842-3) that down to 855 Manilius has been speaking of cardinal points; and from there to the end he all through, according to Breiter, 'hält die cardines als Punkte fest.' This view seems to me perverse. For (1) it leaves unexplained the duplicate treatment, $808-40+918$ sqq., of the influences of the cardinal points. (Breiter, if I understand him, assumes Manilius in $808-40+918$ sqq. to be drawing upon two different 'sources', without perceiving that he was saying the same thing twice over. We have met this kind of hypothesis before); (2) elsewhere, e. g. Firmicus and the Astrol. Cat., the cardines are conceived as regiones and not as points merely ; (3) Breiter's view is only a more insidious form of an older view which he himself combats. It reduces the twelve loci to о́кт⿳亠 то́mor; for if the cardinal regiones are points, then clearly-however much we call them regiones-they are not regiones in the sense in which the other eight loci are. Even granting that you are left with twelve regiones, yet these split up into two systems, $8+4$.

But that the óкт̀ то́ло are a mere figment no one is more convinced than Breiter himself. We may here conveniently dismiss this figment in a very few words: (1) It has its origin in 968-70, which betray, both by their matter and their language, that they are an interpolation; see note ad loc. (2) No other writer knows of a system of óкт̀ то́то-the octo loci of Firmicus are different. (3) There is nothing anywhere in 864-970 to show that Manilius was conscious that at 918 he was entering on a different system. The loci of 918 sqq. are treated as precisely on a par with those of 864-917. (4) There are twelve athla in Book III.

Bouché-Leclercq defends doubtfully the view that Manilius recognizes an eightfold division of the Circle. But he is prepared to see (apparently in the whole of $864-70$ ?) the work of an interpolator. For various explanations of the origin of this eightfold division see his note, p. 271.
864. quae super exortum : the twelfth regio.

867-70. par erit: the regio diametrically opposed-the sixth.
868. iuncta sub occasu : 'next to and beneath O. C. C.'
uel praestite cardine mundi: 'even though a cardo watches over it, each is called deiecta because each threatens disaster.' I have written uel for nen: praestite is due to Jacob.
praestite : almost uicino (873) ; abl. absol. in both cases.
Jacob quotes Firmicus ii. 20 loca pigra et deiecta esse dicuntur, quod nulla cum horoscopo societate iungantur. In our present passage uel praestite cardine mundi.. . fertur deiecta $=$ ' nutla
cum horoscopo societate iunguntur' quanquam horoscopus (in Manilius cardo, O. C. C.) praeest. All editors save Jacob read new (ne Du Fay) praestet. The subject of praestet Scaliger takes to be $\dot{\eta}$ dívıs; Bechert, following Du Fay, finds it in alterutra (extracted, I suppose, from utraque in 869).
870. porta: so Scaliger, rightly, for aorta M. G indeed has ora, $L$ ort; but here, as so often, $L^{1}$ shows a greater sincerity that its brother MS. orta is easily explained from porta; but who would


The Dodecatopos
alter ora to orta? Scaliger compares 951 Ditis ianua, Paulus A1, äßov $\pi v ́ \lambda \eta$ [so Vettius Valens Astrol. Cat. v. 2, p. 93], Firmicus' inferna porta. Cf. Sill. Ital. xiii. 541 naufraga porta (in Hades).
871. super occasus contraque sub ortu: the second regio and its diametrical opposite, the eighth. Both are Typhonis sedes.

872-4. 'The one (regio ii) is tumbling headlong (into J. M. C.), the other (regio viii) hangs trembling (over the O. C. C.), and fears either
to perish in the neighbouring cardo (the cardo below it, O. C. C.) or to fall if robbed of its support.'

No editor, I think, has seized the sense of these three lines. All have interpreted Manilius as though he had written haec praeceps metuit uicino cardine finem, illa supina pendens fraudata uicino cardine cadet. But no: Manilius' description of regio ii ends at praeceps haec; illa...cadet is all part of the description of regio viii. Regio viii fears either to set in the O. C. C., or, if deprived of the prop of O. C. C., to fall utterly into I. M. C.

Du Fay, Pingré, Bouché-Leclercq, Breiter all make the subject of metuit to be regio ii, and are then obliged to take uicino cardine of Hor. ' appréhende d'être écrasée par la maison orientale', Pingré.
supina, 'giving,' 'ready to sink,' ' weak.' I have retained the reading of $M$, which is, I think, sufficiently defended by Catullus xvii. 4 ne supinus eat (ponticulus) cauaque in palude recumbat, where supinus means, not $\begin{gathered}\text { orrtos, }\end{gathered}$ as Ellis, but what in English is called, of boats and the like, 'buckling.'
uicino: i. q. inferiore, as often in Manilius.
876. nec matre minores : so many roods did these giants cover, they are said to be as big as Earth which bare them.
877. in altum : in profundum terrae. Perhaps in aluum,' to the womb of Earth.'
878. et super cadentes rediere montes: i.e. eos, ut in altum ceciderunt, montes obruebant.
879. 'And Typhoeus passed reluctant to the grave of himself and his warfare.'

881-2. The regio ' which follows, and is next to, the summits of the shining heaven', next to M. C., is the eleventh regio.
882. uix ipsi cedat: ' would scarce yield to that star whereto it is neighbour,' i. e. to the M.C. astro $=$ planetae $=$ Veneri, the planet being here put for the regio which it governs.
uix (nec $=$ nex $G L$ ) is due to Bentley ( $M$ 's non is a bad interpolation). Jacob and Breiter retain the MS. reading. 'qui fungitur astro: cardo (he means cardine) qui praesens regnat,' Jacob; 'qui fungitur: Juppiter, unter dessen Tutel dieser Ort steht,' Breiter; and Manilius, like Typhoeus, turns in his grave.
cui iungitur, Huet, rightly, for qui fungitur.
astro can scarcely be interpreted of the planet Jupiter cui iungitur, to which is assigned regio $x i$ (so, with fingitur $=$ adfingitur, Ellis), since the point is that this regio scarcely yields to the fastigium itself.
883. spe melior: sc. quam priores; so 884 altius sc. quam priores.
885. in peiusque manent cursus: in peiusque cursus, of course, together; ' there is left for it only a progress to a position that is still inferior'- to that of the fastigium.
887. inferior : so the edd. vett. rightly for MSS. interior. integrior, Housman, perversely (which if it means minus periculo obnoxia is not even Latin).

The construction is: minime mirum est, si ( $=$ si quidem, $\epsilon i \pi \epsilon \rho$, seeing that) proxima summo eademque ueneranda sorte (=fastigii sorte, M. C.) inferior locatur, quod titulus felix. Felix is the natural title of a sors so situated.
ueneranda sorte: abl. of comparison after inferior. The ueneranda sors is the M.C. It is called uenerandia (1) because that
which is highest (it is fastigium) is always most venerated; (2) by a play upon words, since the regio of the M.C. belongs to Venus (922-6); cf. Plaut. Poen. 278 'Venerem uenerabor': Carm. de Mensibus 13, P. L. M., Baehr. i. 207. For plays upon words in Manilius and elsewhere see note on 410 .
locatur : dicatur MSS. So at 952 the locatur of $G$ marg. and codd. dett. is plausibly corrected by Bentley to dicatur. [dicatur is, however, perhaps just possible, of the sors regarded as a templum, cf. templa in 943.]
890. fortunae crede regenti: the sors felix is not the sors Fortunae ; yet the presence in it of Jupiter carries with it as a corollary the presence of $a$ Fortuna. Jupiter and Fortuna are associated in more than one Italian cult. Fortuna, according to Cicero De Div. ii. 85, was the mother of Jupiter. Elsewhere she is the child of Jupiter (Fortuna Iouis puer), the Fortuna Primigenia of the much vexed Praeneste inscription, C. I. L. xiv. 2863 ; cf. 2862, 2868. Gaidoz, it is worth noting here, regards Fortuna as originally a solar divinity; hence her wheel, or globe (Etudes de Mythologie Gauloise i. 56 sqq .). The Fortuna of 927 is clearly reminiscent of the Fortuna Virilis of whom Ovid speaks at Fasti iv. 133 sqq., who came gradually to be confused with Venus. (See Warde Fowler Roman Festivals, pp. $67-8,161$ sqq., 223 sqq .)

891-904. The fifth regio, overhanging I. M.C.
891. huic in peruersum similis: wrongly explained by Breiter, who takes in peruersum as $=$ in partem infelicem. No: the fifth regio is like its diametrical opposite, the eleventh, in that it is just above I. M. C., while the eleventh is just below M. C. ; that is, its relation to its cardo is similar to that of the eleventh to its cardo, only inverted (in peruersum).
haec peruersissima sunt: scribe in transuersum, Postgate.
892. cingens fulcimina : so I have corrected for the contingent $(=$ ctingent $)$ fulmina of MSS. Scaliger, followed by Breiter, keeps fulmina as =fulmenta. But, while fulmenta is connected with the root' of fulcio, fulmina is connected, surely, with that of fulgeo. Du Fay's culmina (which Bentley produces as his own) is, as Breiter remarks, appropriate only to M.C.
fulcimina is another of those rare Ovidian words affected by this most Ovidian poet.
893. sub acta: su pacta $G$, with a rare fidelity, per acta cett. defessa sub acta became by a haplography defessa bacta (pacta), which was ingeniously emended to per acta in LM. Not only is sub acta the more Manilian expression, but 251, 'sub emerito considens orbe laborum,' furnishes an exact parallel.
895. subitura iugum : 'to take upon its shoulders the scales'-the cardinal sign of the I. M. C. being, in the thema mundi, Libra; but there is, of course, a play on subire iugum $=$ 'to pass under the yoke.' See note on 887.
896. onus mundi : onus as Luc. iv. 58 iustae pondera Librae.
-898. inuersus, Housman, rightly, for inuersu: see Ellis' note where, while recommending inuerso, Ellis shows that in uersu, the usual correction, is unlikely.
899. nomenque : momenque, Ellis, comparing Lucr. iii. 145, paret et ad numen mentis momenque monetur; and to this $M$ 's demouenque. perhaps points.
902. bella ... pugnantia : the personification here of bella which

148
are said to fight with the secret instruments of disease is noteworthy and even suspicious; but cf. on $4-5 . \therefore$
903. quod ambigo casusne deine uivibus geminis accidat, Breiter, but he does not explain what the geminae uires are; I suppose the power of health and the force of disease. casusne deine seems assured from Aen. xii. 321 incertum, quis tantam Rutulis laudem, casusne deusne (casusue deusue M ), attulerit ; in which passage incertum exactly corresponds in construction to our ambiguum-though Ellis desiderates some word quo referatur ambiguum. Cf. Germ. Arat. 315-16 est etiam, incertum quo cornu missa, sagitta.

905-10. The ninth regio $=$ regio Phoebi.
905. medium post astra diem = astra post medium diem (so already Bonincontrius). Explained more fully by what follows, 'the regio ( = astra) that comes after the medium caeli and the heights where they first begin to slope down from the summit of the poised universe.' The ninth regio is post medium diem as the eleventh (881) is ante medium diem. For the anastrophe medium $p$. astra diem see note on 53. For astrum $=$ regio cf. 882 ; but the plural presents difficulty. Breiter follows Scaliger in emending to castra; but even so he propounds an impossible interpretation. castra he takes as $=$ cardinem (!) and thinks that the ninth regio can be called medius dies post cardinem, the midday or zenith that follows the midday or zenith. To witness if I lie let any one consult his note. Not content with this, in order to show that astra is impossible, he says that astrum would be possible because at 882 it stands for cardo, but at 882, though it does stand for a cardo, yet Breiter's own note on 882 lays it down that it stands for the regio ante cardinem! In 964 (by which Breiter supports castra) castris is clearly metaphorical.
medii post (c)astra die, Scaliger, awkwardly; medium post articulum, Bentley, audaciously ; medium post dextra diem, Ellis, i. e. dextra loca post medium diem. But Manilius nowhere here employs the distinction of laeua and dextra signa; and indeed is speaking of regiones, and I am not sure whether these could appropriately be called laeuae and dextrae.
907. sub quo quia is due to Ellis; so too Housman; in sub quo (hoc Jacob!) quoque, Bentley, \&c., quoque is meaningless.
908. detergent: decernunt codd., which Ellis (q.v.) defends. Phoebus might be said decernere uitia for the regio (as in Ellis' examples from Firmicus, \&c.), but not conversely. Moreover decernunt uitia would demand aut for et. Jacob, followed by Housman, reads declinant. My detergent is palaeographically nearer and more suited to the associations of the god of purification. For this use of detergere compare Claudian Eutrop. ii. 10-II ire recentes detersum maculas ; and, for the purificatory power of the sun in disease, Gratius Cyn. 42 1-2 (of diseased cattle) nudis incumbant uallibus aestu, | A uento, clarique faces ad solis ut omne $\mid$ Exsudent uitium.

Jacob's declinant is, I suppose, based on Cicero De Offic. i. 6. 19 declinant uitia. The C.G.L. v. 451 has ditergit abstergit uel declinauit.

910-17. The third regio (Phoebe), diametrically opposed to the ninth (Phoebus) ; called Dea, as the ninth Deus.

910-1I. The third regio is the first as one passes up from I. M. C. to O. C. C.
915. fataque, \&c., 'expressing misfortune by the ruinous edges of her face,' Ellis. But Du Fay, Jacob, Breiter take the line quite differently.
damnosi oris fines sunt, ut quod sub caelo ex maxima parte lateat. His ergo fata fraterna imitatur: i. e. potentiam illi similem exercet sed debilem, Jacob; i.e. fata $=$ sortem Phoebi. To the same effect Du Fay fata: sc. fratris; damnosi fines bezeichnet die pars deiecta sub orbe, Breiter. Truer than any of these is, I think, Pingre's rendering: 'qui perdant peu à peu sa lumière vers la fin de sa révolution, est une image des derniers instants de la vie.' But the line is, I believe, spurious. It stood at the foot of a page in A. See Introduction, p. xxiv.
926. tutela . . . sua tela : there is an intentional play upon words, which I have tried to reproduce in my Translation by 'region', 'legions'. Roman poetry never shook off the native Italian predilection for assonance, and in the period when it was dominated by Stoicism perhaps the great attention which the Stoics gave to etymology tended to keep alive the fondness for plays upon words. For Manilius see-in this book alone-the notes upon 410 (signis), 887 (ueneranda), 895 (subire iug unn), 896 (onus, honorem), 932-3 (deiectus-a reference to the name deiecta loca), 946-7 (natorum . . . natura). At iv. 729 the quantity Maurètania is perhaps to be explained by the supposed etymology Mauri taenia (tavia, 'reef'). From other poets I collect the following: Catullus xi. 6 Sagas sagittiferosque Parthos (with which cf. Gratius Cyneg. 157-8 martemque odere Geloni sed natura sagaxwhere there is an allusion to the name Sagae, as perhaps also in Verg. Aen. viii. 725 sagittiferosque Gelonos); Cic. Arat. 121 leuipes leprus; Dirae 129 tauro Ioue digna uel auro ; Catalepton 1* 3-4 ligneus ignem $\ldots$...ignaris (see my note C. Q. 1910, p. 122); Verg. Aen. iii. 183 casus Cassandra canebat (where, as Dr. Postgate has suggested to me,we should no doubt write cassus-a well-attested spelling ; see Brambach s. v. and Ribbeck Proleg. p. 420 ( 1866 )) ; iii. 540 bello armantur equi, bellum haec armenta minantur; vii. 791 argumentum ingens et custos uirginis Argus. (At Aen. xii. 96 we should read maximus actor, ' mightiest hurler,' with a play on the proper name Actor); Ovid Met. ii. II et natas quarum pars nare uidetur; Fast. vi. 380 deses desere; Lucan i. 31 Poenus erit: nulli penitus descendere ferro contigit; i. 214 puniceus Rubicon; i. 637-8 Tages . . . tegens; iii. 596 uenturis ... uentis (just as Seneca Agam. 469 uentis. . . uenturis). At Seneca H. F. 767 concauae lucent genae there is a play upon Charon and रápou. In the later popular poetry examples are endless: Carm. Epigr. Buech. 640. 2 clara genus et pulcra genas may suffice. From prose writers-Seneca Dial. ii. 6 gaudent feriri et instare ferro is moderate compared with Pliny N.H. xxxiii. 90 uisum chrysocolla sterni cum ipse concolori panno aurigaturus esset (xpuósaurum).
627. quo percipe mentem: quo nomine mentem loci percipe. Bentley reads quod percipe mente, which is perhaps an improvement, and would support nomen in 899. For Fortuna see on 890.
929-38. The I. M. C. It belongs to Saturn and guards fathers and old men.
932. deiectus: playing upon the name of the regio-pigra et deiecta (Firmicus).
935. priua est tutela duorum : for priua the MSS. have, by a common error, prima. Saturn has a separate care for fathers and old men.

For duorum $=$ utriusque cf. 228. [Nevertheless I am inclined to think that Manilius wrote tutela est una duorum; when, by an acci-
dental transposition, this had become una est tut. duorum, the change una to prima was necessitated by the metre.]
936. One thing at least is clear with regard to this line: nascentum has no place in this context. Saturn has nothing to do with nascentes; they belong to Mercury, cf. 539 sqq . But, if nascentes have nothing to do with Saturn, senescentes have a great deal. nascentum atque patrum represents an original scholion 'senescentum atque patrum' in explanation of duorum in 935. [Incidentally it becomes clear that the last half of 935 is not (as Jacob and Breiter hold) spurious; if there had been no duorum in the text there would have been no senescentum atque patrum in the margin.] The meaningless quae tali condita pars est may be regarded as a mere stopgap for the defective versification of nascentum atque patrum.
937. asper erit templis titulus : asperum codd., involving an unManilian elision : yet cf. v. 375 ; for templis $G L$ have tempurs, which is the same thing ; $M$ has templum (temphü), which is templis less its final letter. For the plur. templis, of a single pars, see below 943 haec tua templa ferunt. asperum erat tempus titulum cui, Bonincontrius, who comments thus: tempus quo filius Iuppiter expulit patrem asperum erat. Bene, Bonincontri!

When he speaks of asper titulus Manilius, under daemonium, conceives of Saturn, as какòs $\delta a i \mu \omega \nu$. For this title see Bouché-Leclercq, pp. 283, 285.
937-47. Regio Exortus: the tutela Mercuri, which presides over births and the hopes of parents.
941. uiridis means quite simply 'of the colour of the sea': cf. Ovid Tristia i. 2. 59 pro superi uiridesque dei quibus aequora curae. Ellis cites Dirae 142 sidera per uiridem redeunt cum pallida mundum (where uiridis mundus $=$ oceanus).
-944 sqq. I think I have restored at least the general sense of these perplexing and corrupt lines. 'And you will perform, if you mark births' (which is the province of the Mercuri tutela), what the name (of the regio, i.e. Horoscopus) and the founders of the art which (has) conquered Olympus, assign to you.'

The MSS. in 944 offer ofacies signata nota. Save et for $o$, notas for nota, I have not changed a letter. And Statius Siluae ii. 7. 93 M (our M, be it understood: see Introduction, pp. xxv sqq.) has signatum for sic natum. The spelling gnatum has attestation, in the earliest MSS.: see Ribbeck's Vergil, Prolegomena, p. 420 (1866); cf. Lucr. iii. 29 sic natura Avancius : signatura codd. si nata notas is suggested to Manilius by Maia Cyllenie nate immediately preceding-the words indeed support my correction.

In 945 'the art which conquered Olympus' is, of course, astrology or astronomy; of which art Manilius, in the long exordium to his poem, recognizes Mercury as the founder ; tu princeps auctorque sacri, Cyllenie, tanti, \&c., i. 30 sqq. ; Diodorus i. 16. I фaai $\pi \epsilon \rho i \tau \in \tau \bar{\eta} s \tau \omega \bar{\nu}$
 Germ. Arat. ad fin.

Of other emendations I know none save Jacob's © (the symbol for Venus; he means $\gamma$; the same error in Ellis, p. 76) for $o$ in 944, and Housman's pro, of which the former is at any rate arresting. But after all $\oslash$ is merely a symbol, a shorthand; and (1) 'a word does not become a monosyllable because it is written in shorthand' (E. J. Webb, C. R. xi, p. 310); and (2) 'as Letronne fifty years ago maintained,
there is no reason to think the planetary symbols as old as Manilius' (ib.).

Bentley, followed by Breiter, obelizes both lines. Of commentators, Bonincontrius has two notes: (1) 'nota: sc. signo evidenti'; (2) 'nota: quod artificio hominis praeest ille planeta' (I can make nothing of these). Scaliger and Huet are, as Bentley notes, basely silent ; Stoeber steals from Du Fay (who steals from F. Junius) a note better left in its place. Bandini's rendering 'o imagine col suo proprio segno notata' leaves us where we were, Ellis alone, in a learned note, really faces the passage. (With his note cf. Mart. Cap. 102 Eyssenhardt.) Yet he ends by rejecting everything from quod (944) to artis (945). Postgate favours the same rejection. 'Rem de qua loquitur', he then says, 'aeque mihi atque aliis ignotam esse fateor.' But he goes on to explain ' 0 ' as the first letter of the word Olympus-quae ducit Olympum; signata as = signata est; facies as the facade of Mercury's temple. [In 945 my quae uicit is, I think, a little nearer to the MSS., and a little clearer than Ellis' qua ducis.]
946. in qua: i.e. in qua arte.
947. et caelo: this is, I think, nearer than Scaliger's eque illa, and gives much the same sense. Compare iii. 58 fata quoque et uitas hominum suspendit ab astris. (For suspendit uota, in a somewhat difficult sense, cf. Catull. lxiv. 104 tacito suspendit uota labello--where, however, suspendit is only conjecturally restored.

948-58. Regio Occasus: which presides over old age and faithful friendship. It is called Ditis Iamua.
949. mersat: mersit codd. Similarly at Verg. Aen. vi. 615 merset Madvig; mersit codd.
951. ne. I have retained the $n e$ of all MSS. ; see on 423. It is necessary that I should at the same time point out-what is not clear from editors-that from ne mirere to claudit in 954 there is no pause in sense, nor should there be (were the line complete) more than a comma after 952.
nigri . . . Ditis ianua : cf. Verg. Aen. vi. 127 atri ianua Ditis; Gratius Cyneg. 34 praeceps ianza Ditis; see on 870 .
952. et finem retinet uitae : the line is unfinished in GLM, save that a later hand in $G$ has added mortique locatur. Bentley ingeniously corrects this to mortique dicatur. But to no purpose. For the mortique of $G$ is itself a blunder for Martique. Martique locatur is found in Bonincontrius (and in no earlier edition). That it was a conjecture of Bonincontrius himself, and passed to $G$ from Bonincontrius, may be regarded as certain. Soldati (Rivista di Filologia xxviii, p. 287) has called attention to a note in a copy of the Ed. Bononiensis Bibl. Riccard. libri rari 43I, which puts the matter beyond doubt. The note is written by Bartolomeo della Fonte, and is as follows: ' Martique locatur putat addendum Laurentius: nam nullam de Marte [poeta] mentionem fecit.'

Breiter's insertion here of per tanta pericula mortis-which appears in $M$ in the form of a lemma after 901 -has, necessitating as it does the excision of the uitae of $G L M$, nothing to recommend it. 959. quae, Bentley, necessarily ; quas, with the MSS., Breiter perversely.
964. in externis... hospita: for the antithesis Bonincontrius compares Lucan $\mathbf{v}$. II hospes in externis auditur (audiuit) curia tectis.
965. sub certa stellarum parte: not 'when I come to treat specifically of the planets', parte, 'department' (as below 968, quoi parti,
and iv. 298 quam partem-both interpolations) ; but ' when the planets assert their allotted influence'; the planets are a certa pars in a system which demands partium mixtura.
$968-70$. Breiter rightly regards these lines as an interpolation. (1) The usage of parti in 968 is un-Manilian; (2) the founder of astronomy qui condidit artem hardly gave a Greek name to this pars: even as Mercury he is Egyptian; (3) Octotropos: probably a blunder for octotopos ${ }^{1}$. But (a) octotopos is an adjective, masc. sing. ; (b) octǒtopos involves a false quantity; (c) octo topos gets rid of the false quantity, but it makes Manilius employ a phrase of which one half is Latin and the other Greek-and that a phrase straight from the founder of astrology! (d) it is pretty clear from quod that our interpolator took octotopos as one word and as acc. neut.; (e) 'mirum uero óктáтото⿱ dici quae omnino סшסєка́тотоs sit', says Scaliger; to which Bouché-Leclercq rejoins aptly 's'étonner n'est pas expliquer'. On this see note at 864. (4) diuersa uolantes in 969 is at least doubtful Latinity. On the whole question see Breiter's note.

## NOTE ON THIELSCHER'S COLLATION OF $L$ AND $M$.

As I have said elsewhere, my record of the readings of $L$ and $M$ depends mainly (where I dissent from previous editors) upon information supplied to me by P. Thielscher, who has collated both MSS. Occasionally, however, a direct statement of other collators is contradicted only by the silence of Thielscher. In such places I have not ventured to draw any inference ex silentio. I give here, in the principal passages, the reading to which Thielscher's silence points. That positively attested by other editors will be found in my Apparatus Criticus.


## 897 Daemonien $M$

These variants (twenty-seven in number) are all trivial ; and no one of them (save perhaps 195 and 550) is even interesting. I have therefore not cumbered my Apparatus with the doubts they suggest-some of these doubts it would need the eyesight of an Epidaurian serpent to resolve. Where a direct statement of Thielscher deliberately contradicts a direct statement of other collators I have throughout followed Thielscher. I would ask the reader particularly to note that where I am silent about certain variants of $M$ recorded in other collations, my silence means that these variants are, according to the positive testimony of Thielscher, not found in M.

[^116]At the following places Thielscher notes that $M$ cannot be deciphered certainly: 234 amiciū uel simile aliquid 345 uecū (uel necū) $\quad 372$ cue (uel one) ${ }^{1} \quad 642$ fortasse geum 675 fortasse imitantes. ${ }^{2}$ At 665 he calls attention to the fact that $M$ really testifies to nec iungitur. The scribe wrote, as Thielscher thinks, ne ciugitur. It would be possible to read this as ne cingitur, but it more probably stands for ne ciūgitur $=$ nec iügitur (the true reading). Such wrong separation of words is constant in $M$ (so constant that I have not always thought it worth recording).

Thielscher for the first time supplies the marginal lemmata to $L$. (Why these were omitted by Breiter, who carefully records the lemmata of $G M$, I do not know.) With regard to these he writes: 'Die in $L$ am Rande angebrachten Lemmata erinnern in der Kleinheit ihrer Buchstaben lebhaft an die Schreibart des Cusanus.'

I add here two admonitions: (1) My Apparatus does not take full account of the use in this or that MS. of contractions (save where some critical question seemed involved); (2) the symbols $G^{2} L^{2} M^{2}$ represent, as I have stated elsewhere, a manus correctrix aequaeua in $G L M$. But quite often this manus aequaeua is apparently the hand of the original scribe ( $G^{1} L^{1} M^{1}$ ). In my Apparatus, therefore, $G^{1} G^{2}$, for example, means merely two coeval variants, and must not be taken to imply necessarily diversity of script.

1 tue Cod. Holkham. 2 mutantes Cod. Holkham.

## EX EDITIONIBUS VETERIBUS LECTIONES SELECTAE

```
\(r=\) editio uere princeps, auctore Regiomontano, 1472-4.
\(n=\) editio Neapolitana prior, 1475-80.
\(x=\) editio in forma quartanaria sine loco et anno.
\(e=\) consensus librorum rnx.
\(b=\) editio Bononiensis, 1474 .
\(\beta=\) editio Romana, auctore Bonincontrio, 1484.
\(d=\) editio Dulciniana, 1489.
\(a=\) editio Aldina prior, 1499.
\(\mu=\) editio Romana, 1510 .
\(p=\) editio Pruckneriana, 1533.
\(m=\) editio Moliniana, 1550.
    \(\epsilon=\) consensus librorum bßda \(\quad\) pm.
\(E=\) omnes editiones ante Scaligeri priorem.
```

3 Hectoreamque facit $e b \beta$ : hectoreamque facem $d a \mu p m$ tutam subq. $e$ : tutamque sub $\epsilon \quad 4$ quem fecerat $E \quad 5$ aequora $\epsilon$ : agmina $e \quad$ ponti $r n$ : ponto $b \beta x a \mu p$ : noto $d m \quad 7$ patria (patriā $\beta p m$ ) atqui (atque $b \beta x$ ) iura petentem $e b \beta$ : patriam qui et iura petenti $d a \mu p m \quad 8$ profuso $E \quad 14$ primum ...corpus $E$ 18 lumina $e$ : lumine $b$ : numina $\beta d a \mu p m \quad 19$ rogauit $E$ 23 numina nymphas (nisi quod numia nimphis $\beta$ ) $E \quad 27 \mathrm{im}-$ proprium bdappm: in proprium $e \beta \quad 28$ Persei et Andromedae $E$ 32 Erigonen (nisi quod Erigonem pm) $E$. 39 pecorum ritus $E$ 42 post serit interpungunt $E$ auras $E \quad 45$ suam $E \quad 46 \mathrm{im}-$ mensum tartara natum $E \quad 52$ sacra $E \quad 55$ gustarunt $n$ : gustarint $r x \in \quad 57$ orsa $d a \mu p m$ : ora $e b \beta$. 78 sidera nobis $E$ 83 aeternis $e b a$ : aethereis $\beta d \mu p m$. 85 uita $x$ : uit(uict- $b d$ )amque ac $r n \epsilon \quad 87$ minus $E \quad 90$ pelagi...sidera $E \quad 91$ tenet $r n$ : tenent $x \in \quad 95$ et cum $E \quad 96$ cornibus ora (orta $e b$ ) $E$ 97 reliquit $\beta d$ : relinquit $e b a \mu p m \quad 98$ refert $E$ constans $x b \beta$ : constas $n r$ : constat $d a \mu p m \quad 100$ per aeuum eba $\quad$ p : perennis $\beta d \mu m$ 102 caelumque ac eda $\mu p m$ : caelumque \& $\beta$ : caelum ac $b \quad 106$ eximiam $E \quad 109$ uoluntas $E \quad 1$ Io infidos (in fidos $\mu p$ ) $E$ 112 humani corporis $E \quad 114$ datum est $E \quad 115$ nosset rxbda $\mu$ m : noscet $n \beta \quad$ II6 quis (qui $\beta$ ) $E$ ipsa $E \quad 117$ connexi . . . parentis $E \quad 123$ ipsum $E \quad 124$ ditasset $E$ 132 secanda uia est ac $E \quad 133$ datus $E \quad 139$ uerbero iam $e$ : uerbera $\operatorname{tam} \epsilon \quad 145$ fuit $E \quad 148$ noscendo $r b \quad 150$ at $E$ 153 aduersus $E \quad 156$ mores $e:$ moris $\epsilon \quad 161$ quae $E$ 167 caelo $E \quad 168$ meant $\beta$ : manent ebdappm 169 amissumue $E \quad$ quod $\epsilon$ : sed $e \quad 171$ utque Capricornus qui tentum $E$ 172 hominis . . prioris $E \quad 174$ gemina (nisiquod gemini $\beta$ ) $E$ 176 hoc faciet $r n:$ nec faciet $a \mu p$ : nec facies $b:$ nec facie $x \beta d m$ ratio duplex (dupplex b) $E \quad 177$ utrinque $\epsilon$ : uterque $e \quad 180$ retinent $r n \beta d a \mu p m$ : retinet $b x$.. 181 quos $e$ : quod $\epsilon$ sub sidera $E$ 182 ex $\epsilon$ : et $e \quad$ geminis $x \epsilon:$ geminus $m$. 185 ueris darpm: uires eb $\quad 186$ pars $E \quad 190$ hominis $e$ : oris $\epsilon \quad$ fert $E$ regentem $b \beta d$ : rigentem ea $\quad$ pm

191 nunc iamque $b$ : iam nunc
$m:$ iam tunc $x:$ mittunt $d a \mu p m$ : mittuntque $\beta \quad 193$ dabunt $r n$ : ducunt $\beta$ : dicunt $b x$ : ferunt $d a \mu p m \quad 194$ ab astris $E \quad 195$ hiberni $x \in$ : hibernis $r n$ coeunt (cedunt $\beta d$ ) $E$ quom (cum) uer tunc $x_{\epsilon}$ : quom uerni $r n \quad 196$ ultra quod $e b d$ : ultima quod $\beta a \mu p m$ sursum oris $E \quad 197$ quod $E \quad 203$ praetereat $\beta d$ : praetereant $b a \mu \mathrm{pm}$ : poeniteat $e \quad 205$ noctem (nocte $b d$ ) $E \quad 207$ quod (quo $x$ ) $e$ : quae $\epsilon \quad 209$ sacrata est $E \quad 213$ nunc $\epsilon:$ tum $e \quad 214$ diuisa (nisi quod diuersa d) $E \quad 217$ nocturna] nec signa $E \quad 219$ Castoris esse uices $E \quad 220$ a libris $e b \beta$ : a libra da $\alpha p m$ 223 quod $E \quad 225$ gaudentes aequore $\beta$ : gaudentesque aequore $d$ : gaudentes in aequore ebaupm 228 positisque $b \beta$ : positusque eda $\mu p m \quad 231$ ambiguis $\mu p$. 232 parsque marina nitens $E . \quad 233$ atque illi de(di)gere mixta (in ista $\beta$ ) $\epsilon$ : atque illis terrea mixta $e$ 234 curis] causis ${ }^{1}$ ebda $\mu p m$ : rebus $\beta$ 241 contento $E \quad 244$ uocasse $\epsilon$ : notasse $e \quad 247$ librantur $E$ 249 conscendens rnbdaupm: consedens $x$ : considens $\beta$ 253 contra iacet $E$

255 obliqui $\beta$ : obliquis $d a \mu p m$ : obliquos $e b$ 259 cancro $e b$ : cancri $\beta d a \mu p m \quad 260$ desunt $\beta d a \mu p m$ : dextrum $e$ : dester $b \quad 272$ aliis aliae $E \quad 276$ quaecunque ferit $x \beta$ : quaecunque tamen rnbda $\mu m m 278$ ternis $e \beta$ : terris $b d a \mu p m$ toti desunt quae $E \quad 286$ dextera $x$ : dextra $d$ : dex(des-)ter rnbßaцpm 287 at $r n \beta^{1}$ : ad $b \beta^{2} x$ daupm (uersus bis scriptus in $\beta$ $=\beta^{1}, \beta^{2}$ ) quae $x \epsilon$ : quaedam $r n$ diuersa $x d a \mu p m$ : aduersa $r n b \beta$ 290 sic iustam spectat Libram C. et inde $e$ : dextra (tetra b) ferunt libram capricornus spectat et illum (illam $\mu$ ) $\epsilon \quad 291$ hunc illum $E$ a om. $E \quad 292$ laeua ebß: laeuae daرpm 294 scilicet (silicet $\beta$ ) $E \quad 295$ ternaque (nisi quod terraque $b$ ) $E$ quadrate fingere $E \quad 298 \mathrm{ut}]$ ac $r n$ : om. $x \in 313$ tribus a dirimentibus $x$ : haec a dirimentibus da $\alpha p m$ : a dirimentibus (haec om.) $\beta$ : tribus (a om.) mediantibus $r n$ : ardiri mentibus $b \quad 314$ extremum $\epsilon$ : extremam $e$ 320 fallit $E \quad 322$ ter triginta $E \quad$ quadrum $\epsilon$ : quadram $e$ 326 subiuncti $e$ : subiunctis $\epsilon$. 328 duplicat (nisi quod duplica d) $E$ quaterna $E \quad 334$ ternis pro trinis $\beta \quad 335$ quintam $e$ : quartam $\epsilon \quad 337$ iunctus $r n$ : cunctis $x \in \quad 339$ rectae $E$ 340 uers. om. eb: habent $\beta$ da $\mu p m$ foedere legem $\beta$ $d a \mu p m$ trigonos $E \quad 346$ continuo $E \quad 348$ detractetque $E \quad 349$ efficiat $E \quad 350$ iuuet $E \quad 351$ sint $E \quad 353$ quadratus $E$ 357 demittit $r n$ : dimittit $x \epsilon \quad 358$ deuiaque (leuiaque $b$ ) $E$ 361 per tales formantur singula (sidera $b$ ) limas (binas $b$, lineas $e$ ) eb $\beta$ : per calles . .. limos da $\mu p m \quad 366$ aduersaque tauro $E \quad 369$ praeteream $E \quad 370$ fit $E \quad$ illis $E \quad 371$ inclinant: ac ne $\epsilon$ : inclinant aciem e 374 tertia conuerso (nisi quod terna conuexo $\beta \quad E \quad 375$ et quae $E$ connexo ebda: connexa est $\beta \mu p m$ Phoebus ... propinquus $E \quad 380$ quod euntibus $E$. 38 I $\operatorname{sed} E \quad 382$ se $(\operatorname{sex} \beta)$ coniungunt $E \quad 383$ sic quicquam $E$ 384 certis sub E 385-432 in Bodleiano Bonincontrianae editionis exemplari deest folium : item 619-59 386 habet $E$. 387 in se cuncta $E \quad 389$ semper(-que om.) $E \quad 393$ signa facit $E$ 394 absumpto $r n$ : ad(as)sumpto $x \in \quad 395$ atque ea $e$ : utque ea $b$ : atque ita daupm 390 quoque $E$ ferantur $E \quad 401$ Phoebo $E$ 412 genere $\epsilon$ : generum $e \quad 413$ suorum est $E \quad 414$ astrum $E$ 418 uers. om. $x \quad 421$ aestiuosque $E \quad 422$ annum $E \quad 426$ hic $E \quad 427$ aequalis $x \epsilon:$ aequatis $r n \quad 431$ decertent s.

[^117]caelo $E$
437 uarias . . . nomine uires $r n$ : uarios . . . numine mores $x \in \quad 439$ cyllenie $r n d$ : cylleniae $b x$ : cyllenia $\beta$ : cyllenius aupm 441 regit $E \quad 443$ Vulcano $E \quad$ Mauorti $E$ et Iouis aduersum $E \quad 448$ futuri $r n$ : futura $x \in \quad 449$ fert $\ldots$. curet $E \quad 450$ in a bis scriptus $\quad 452$ caeli $E .457$ sorti$\operatorname{tur} E \quad 460$ regnum (renum $m$ ) $E \quad 463$ femina $E^{467}$ et certa gerunt $E \quad 470$ favore $e \beta$ : furore bdaupm 474 utrique et sorti $E \quad 475$ sed ebaupm: sic $\beta d \quad 479$ possint $E$ post audireque, non post quaedam, leuiter interpungunt rn 486 uers. om. a $\mu p m \quad 487$ taurus $E \quad 489$ mens eb $\beta a \mu p$ : mars $d \mu m$ gesserat $E \quad$ 491 Ioui Geminorum ebßd: Ioue Geminorum $a_{\mu} p_{m}$ ducitur ebd: ducit et $\beta a \mu p m$ aures eb $\beta a \mu p$ : aure dm 493 animum $E \quad$ oculique (-que om. $x$ ) $b \beta d x$ : oculosque rnappm 494 conditur $E \quad 495$ immutaque $E$ tendit $E$ 498 centauros $x n$ : centaurus $x_{\epsilon} \quad$ geminos $E \quad 505$ signum $E$. 507 ipsum $x$ : ipsam rne 517 audire ut cupiant $e$ : ut cupiant audire $\epsilon$ 520 meant $e$ : queant $\epsilon \quad$ etiamque $E$. 550 rabidique $b x d a \mu p m$ : rapidique $r n \beta$ - 556 quaeque $r n d$ : quique $x b \beta a \mu p m \quad 559$ erigonen $r$ : erigonē $n x \beta d a$ : erigonem $\mu p m$ : erigone $b \quad 562$ legem et natura iubentem $E \quad 565$ ueniens $E$ agitat $\beta d m$ : agit ba $\mu p$ : cogit $e \quad 567$ pisces exortus $E \quad 569$ descendunt $\beta d$ : decedunt ebaupm 571 generat $\epsilon$ : generet $e \quad 577$ ne sit $E$ Phoebus $E$ 578 trigoni $E \quad 548$ leuis una ebßap $p$ : leuis urna dm 585 caperet $\epsilon n$ : raperet $r x \quad$ caderet $\beta a \mu p m$ : crederet $e b$ : caederet $d \quad 587$ sponsor $e d$ : sponso $\epsilon$ (exc.d) 591 cum $d b$ : et ebappmr $\quad 604$ pax et $r n:$ pars et $x \in \quad$ II meliorque $E$ 629 et quos dat $x \in$ : et quos praebet $r n \quad 635$ illos $e b \beta$ : illis da $\quad$ pm nam saepe est $E \quad 636$ noxas da $2 p m$ : noxis $e b \quad 640$ tectaeque $x \epsilon$ : recteque $r n \quad$ sub $\epsilon$ : in $e \quad 641$ ex $E \quad 659$ genitosque $E$ 663 texti $E \quad 665$ pingitur $E \quad 683$ proprio (sic) uariante $E$ 675 imitantes $\epsilon$ : mutantes $e$ pectora $\epsilon($ exc. $\beta$ ) : tempora $e \beta$, tam $e b$ : partitam $\epsilon($ exc. $b) \quad$ infectis $E \quad 693$ tenui $E$ passim $e b:$ possit $\epsilon(e x c . b) \quad 700$ constant $e b d$ : constat $\beta a \mu p m \quad 702$ numero $e$ : numeris $\epsilon \quad 710$ sidere $E \quad 711$ quot $E \quad$ 716-17 om. rb: 716-18 om. $11 x$ partu (parte $r$ ) $E$ ( $\beta$ dm) sententia $\epsilon$ 726 quacunque $e$ : quocunque $\epsilon$
731 pariterque sequentia $e$ : pariter (partes sic constant $E \quad 744$ iur $\quad$. ducit dappm 737 quaeque $E$ stellae sunt quinque $\epsilon \quad 747$ stellae in finem $\epsilon$ : stelle in fine $e$ sint sidere $\epsilon$ : sub sidere $e \quad 764$ effluat $\epsilon$ : et fluat $e \quad 763$ uersu quae $\epsilon$ : perdunt quae $e \quad 768$ quaque $e$ : quoque $\epsilon \quad$ numen ab arce $e$ : numine morte $b$ : numen in artes $\epsilon$ (exc. b) 772 urbes (nisi quod orbes b) $E \quad 773$ conditor $E \quad 774$ destinet $E$ 775 uertit opus $E \quad 779$ illi $E \quad$ templi $E \quad 784$ tractanti $E$ 814 decus $d$ : deus $E$ (exc. $d$ ) 815 regnet $x 3 d a \mu p m$ : regnat $r n b$ 824 scrutatur $r n$ : scrutantur $x \epsilon \quad 826$ atque illi tollens $E \quad 828$ unde] una $\epsilon$ : quaque (-que om, $x$ ) $e$ redit $e$ : dedit $\epsilon$ describit $E$ 836 hic tenet $E \quad$ uitae atque $E \quad 849$ quae (quem $b$ ) $E$ inter imumque $e b \beta$ : interque imumque $d a \mu p m \quad 868$ neu praestet $E$ 869 praeterita $E \quad .874$ fraudata $\epsilon$ (exc. b) : fundata $e b \quad 877$ exstiterant $e$ : exstiterint $\epsilon \quad 883$ priorum $\epsilon$ : piorume 884 finis $\epsilon$ : fini $e \quad 887$ inferior $\beta d a \mu p m$ : interior $e b \quad 889$ uirtutis (ueterique a $\beta$ ) nomine $E \quad 890$ hac $e \beta$ : hoc ba $\mu p$ : hic $d m \quad 891$ huic (hinc $\mu p$ ) in peruersum (imperuersum $p$ ) similis $\beta d a \mu p m$ : huic
imparsum similis $b$ : huic atq. impium simili $e \quad 902$ caecis] tetris caupm: terris $b \beta d \quad 903$ causaque deique $r n$ : causaque diei $x \epsilon$ 907 habet $r n$ : amat $\beta d a \mu p m$ : aut $b x$ sub quoque $b x$ : sub quo iam $r m$ : sub quo quoque $\beta d a \mu p m \quad 909$ concipiunt $E \quad 915$ oris $e b$ : orbis $\beta d a \mu p m \quad 918$ decliuia $e b$ : accliuia $\beta d a \mu p m \quad 920$ culminaque $E \quad 934$ proprios (nisi quod atrios $\beta$ ) $E \quad 935$ prima est fortuna $E \quad 937$ titulum cui (quoi b) $E \quad 949$ mersat $E$ 950 terraque $e \beta a \mu p m$ : terra $b d \quad 952$ martique (mortique $a \mu p m$ ) locatur $\beta d a \mu$ m: lacuna in eb

## DOCTORUM VIRORUM USQUE A SCALIGERO CONIECTURAE

> Scaliger $^{1}=$ Scaliger in editione priori.
> Scaliger $^{2}=$ Scaliger in editione altera.

3 Hectoreasque facis Jacob: castra ducum et Rhesi Ellis uers. secl. Bentley 5 instantem belli Scaliger: instantem saeuo I. Voss in marg. editionis s. l. et a. Bibl. Bodl.: iactati pelago Bentley : innantem pello Schmidt geminataque Pergama Bentley, puto recte 7 patriam cui Graecia septem Bentley: patriam cui iniuria septen Kiessling $\quad 14$ partus Bentley 15 Titanas iuuisse Iouis Scaliger ${ }^{1} \quad 16$ sine patre parentis Scaliger ${ }^{1} \quad 18$ uers. secl. Bentley 19 nouandi Bentley 23 munia Jacob sociataque numina nymphas Housman uers. secl. Bentley 42 antra Bentley: aulas Housman 43 saecla Bentley 44 fort. damna per 46 atrum Scaliger: atris Bentley 71 uers. secl. Bentley 72 sua] uaga Bentley: fort. stata 84 leuiter post recessu interpunxit Bentley $\quad 85$ comminus Scaliger: nec procul temptabam

88 si Bentley, itemque 89, 93, 99.
dus post 105 lacunam statuit Jacob
temptabam 112 uers. secl. Bentley
II8 templa W akefield, ipsi res Scaliger 130 132 arte secanda Bentley 138-40 secl. frequey 139 uerbere agam Scaliger 145 fugit Scaliger $:$ frequens Pingré: fluat Jacob 147 diuisa Ellis: blandos ad uerba sonos Scaliger ${ }^{1} \quad 149$ praedicere Scaliger ${ }^{1} \quad 150$ ac Jacob 151 nominibus Bentley 153 auersos ... artus Bentley, fort. recte 154 secus Bentley 157 quaedam] etiam Scaliger: quin iam F. Junius 166 positura Bentley 169 quod] quoque Scaliger ${ }^{1}$ : sunt Bentley post 172 lacunam statuit Bechert 173-4 secl. Bentley Jacob Breiter 191 sua dantque Salmasius, Anni Climacterici, p. 320: mutantque Jacob: nutatque Breiter 197 quod tuentur F. Junius, Ellis 216 nec .... nec] sex .... uel Fayus: ter . . . ter Jacob: nunc . . . nunc uel uel . . . uel Breiter uers. secl. Bentley 222 femineam noctem Scaliger: femineam sortem noctis Bentley 223 nonnulla satis Huetius 224 populosus Bentley. 225 marmore Jacob . 226 aut quae Kleinguenther 228 hostisque Scaliger 229 rimosis Jacob 231 et aequoris undis Scaliger $\quad 232$ parsque mari nitens Scaliger: pars maris urna nitens $J a c o b \quad$ aequali foedere mixta Scaliger ${ }^{2}$ : aequali sidere mixta Fayus, prob. Ellis 234 minimis minimum Scaliger ${ }^{1}$ 244 momenta Bentley 252 fort. tuis in artum Scaliger ${ }^{1}$ 253 quacue] strata Bentley 267 esse] ire Bentley 268 terrae tuentur Jacob Ellis 270 noscere sortes Bentley 272 aliis aliae Bentley 273 ut flexo signorum Bentley 280 conspicis cum dett. Jacob Ellis 283 tortus Ellis uerba distant (desunt) $283 .$. exemplo est 287 secl . Bentley Breiter 284 seu] sua Salma-
sius, Anni Climacterici, $p .138$ : ceu Ellis : fort. si censa : scaeuisque Housman ita ut 284-6 abiciat: dextra an sint laeua Jacob, prob. Bechert 298 et Bechert 303 e trinis Housman 304 astra] posta Bentley: fort. trina 322 ter quadra triginta Jacob, quod ita commendat Postgate ut quadra pro fem. sing. habeat : cum reddat Postgate 326 subiuncti Regiomontanus 330 post unius $\tau \in \lambda \epsilon i a \nu$ $\sigma \tau 1 \gamma \mu \eta \boldsymbol{\eta}$ ponit Scaliger 331 quinis Bentley 332 fidem quaeri Bentley 334 cum] fort. tu 339 curuata Bentley : fort. sinuata 349 efficiens Scaliger ${ }^{1} \quad 358$ at dubia Bentley: debilia Jacob ante hunc wers. collocat wers. 374 Scaliger ${ }^{1} \quad 361$ cum praeteriens Housman: cum pertransit formatus s. limes Bentley: formatur talis per s. limes Ellis $\quad 365$ quin te Breiter 371 sexangula Bentley: obeuntia Ellis $\quad 372$ inclinat acne Jacob: inclinant acnae Ellis 374 uers. secl. Bentley 375 at Scaliger quis accedit Bentley 380 subeuntibus Breiter: coeuntibus Ellis: diuersum est genus alternantibus Bentley, prob. Bechert 381 sex Scaliger 383 sic, inquam Scaliger: sic quoque in Jacob, minus Latine: si quicquam Ellis $\quad 387$ in se ducta (iuncta ed. I) . . . qua Scaliger 409 hos seruant Jacob rursus Scaliger uers. secl. Bentley 412 et generis uinclis Bentley : et genera (genere Housman) amplexis Jacob
 Bechert 413 maribus Bentley, puto recte si . . si] quod . . . quod Bentley 420 nudaeque in collibus urbes Ellis: fort. nudique in sole labores 426 post 427 collocat Postgate 428 tempora nam Bentley 429 par nox parque dies Bentley 430-1 coniecturas pudet enumerare 433 restat, quae Bentley post cura signum interrogationis posuit nescio quis (saec. xvi?) in not. Mstis ad oram editionis Bonincontrianae Bibl. Bodl.: item Jacob Bechert Breiter: cura pro imperatiuo habet Slater 441 tuque pater cum Bentley 447 aethere Bentley 449 uariet stellas et s. curet Scaliger 454 parent in signa Scaliger ${ }^{1}$ singulaque imperiis propriis parentia membra Housman 474 utrique aut sorti Bentley $\quad 477$ aliorsum bis Ellis 510 fastidia Immisch $\quad 520$ quin et tota meant aduersa Bentley: quin aduersa meant coniuncta (et iuncta iam Jacob) Breiter: quin utrinque meant aduersa Ellis 528 suae parti Fayus 534 homini uictus Jacob: minor hinc uirtus Housman quo Scaliger: quid Postgate 535 nascentis] ingentis Jacob: armentis olim temptabam 534-5 secl. Bentley 542 Vide apud Ellis ad loc. doctorum indoctorumque coniecturas 551 et in Bentley astra Bentley 552 Erigonae Jacob 559 ipsi Gronouius. 562 naturae lege Scaliger 571 nolle Postgate 576 illinc Bentley utrisque Scaliger 580 totiens Bentley $\quad 581-8$ post $589-607$ collocat Scaliger .582 foedere Housman $\quad 586$ et] haec Postgate uix noxia poenis] uadimonia sponsi Scaliger: uestigia tum cum Bentley: uix noscere poenas Ellis: uestigia poenis Postgate 588 sponsorique Bentley 592 ah Scaliger 593 excusabile Scaliger. 594-5 secl. Bentley 619-21 secl. Bentley 619 at qui Postgate 620 non pacem . . . gerunt Postgate 621 utriusque animis contendere Jacob cogit] surgit Postgate 629 fort. set quos dant Chelae Geminique 635 saepe est nam Scaliger astus Huetius 642 ternis Scaliger 644 uers. secl. Bentley 659 piscis] menses Bentley: uiscos Immisch 661 quaeque Bentley 672 tenent ab sanguine Bentley post 672 collocat Bentley 681-3, tum 673-80: tralaticium ordinem tuetur Bechert 683-6 secl. Bentley 683 proprio quadrante Scaliger, qui uersum ante 681 collocat, alioquin
seruans ordinem tralaticium 684 fort. diuiso . . . orbi 681 post proxima interpunsit rauter Scaliger ${ }^{1}$ (post subscribun tollunt Jacob Breiter, de quorum ratione uide Jacob ad loc. 687 post 690 (cum Vossiano primo) collocat Scaliger : post 688 lacunam statuit Jacob

692 discernere Pingré 693 percipe L. Mueller (ut 738) 709-10 secl. Bentley 709 in peius deerrat Housman 713 quae Bentley 730 et quae dehinc fuerint Scaliger: quaeque hinc defuerant Bentley: quaeue hinc defuerint Dixon 741 nempe Housman 756 uers. secl. Bentley $\quad 758$ legenti F. Junius: legendis Ellis $\quad 763$ uersis quae Scaliger: uertas quae Ellis: uel sua praepropere Bentley 766 obrutaque Bentley $\quad 768$ artem Immisch 744 manu Scaliger, fort. recte 775 uersat Bentley: urguet Jacob: feruit Ellis, qui 775-83 in parenthesi locat, prob. Bechert 780 fort. rigor per uiscera terrae 784 conanti Markland 797 discernitque Bentley : reclinatque Housman 803 aeternis Bentley 817 urbem Bentley 822 speciest olim Breiter: speciem ... usum Bentley, coll. 5. 152-3 824-5 secl. Bentley 826 aeque illi Scaliger 827 quae tenet Housman 836 uitai Bentley: uitale Lachmann, Lucr. p. 161, Bentleium redarguens: uitae hic est Kleinguenther: uersum hiantem tuentur Jacob Bechert 837 dispicit Lachmann, Lucr. p. $236 \quad 840$ coitus Bonincontrius in Commentariis 851 perpetua serie Bentley 852 quadrante sub imo Bentley 860 natura] positura Jacob 863 poenamque ferent iam Scaliger ${ }^{1}$ : poenamque serens (ferens Bechert) in Jacob Bechert 868 ne praestet Fayus : sine praestite Jacob uers. secl. Bentley 869 ut quae Scaliger 872 superne Scaliger 877 artum Cartault: fort. aluum 880 flagrantem Scaliger $\quad 881$ at quae fulgenti ...caelo Scaliger 882 cui fingitur Ellis 888 quoi (cui iam Dulcinius) Scaliger 891 transuersum Postgate 892 contingens culmina Bentley 899 momenque Ellis 905 medii ...die Scaliger: castra Scaliger: dextra Ellis: medium post articulum Bentley $\quad 907$ aethera] atria Scaliger: degere Bentley : sedem Housman 908 decerpunt Huetius: declinant Jacob: decernunt uitam Scaliger 912 noctesque Breiter 923 uelut in facie (uelut in iam Huetius) Beintley 927 quod Scaliger 934 fort. census 935 fort. tutela est una prima . . . tempus (937) secl. Jacob $\quad 936$ parte est Scaliger 937 asper et adtemptus Scaliger 938 signat dignas Housman: fort. signat saeuas 944-5 secl. Bentley: quod (944) .. . artis (945) secl. Ellis, prob. Postgate 945 qua ducis Olympum Ellis 947 eque illa suspendit Scaliger 949 mergit Bentley 952 uitae, mortique dicatur Bentley : uitae, retinetque repagula mortis Housman 955 ipsi Breiter $\quad 968-70$ secl. Breiter

## INDEX TO INTRODUCTIONS

(The roman numerals refer to pages, the arabic to footnotes.)

## Adalberon, lix.

Africitas of Manilius, lix, lxxiv.
Aldus Manutius, $1 x x x$.
Ambrosiaster, lxxiii ( $\mathbf{x}$ ).
Anchialus, lxv.
Antonio, St., library of, xlvii.
Antony, M., lxvii.
Aratus, lviii, lxi (r).
Archetype of Manilian MSS., xixxxvi.

Arnold, M., xxviii (3).
Asconius, xxiv, xxv.
Astrology: in Greece, lxv; in Rome, lxv-lxx ; connexion with Stoicism, lxv.

Astronomica of Manilius: date of, lxi-lxiv ; incomplete character of, lxxii; neglect of by astrologers, lxxiii ; MSS. of, xv-lvii; editions of, lxxv.
Astronomicon : gen. pl., Iviii (4).
Auratus, J., lxxxi.
Ausonius, lxxxiii (3).
Barbaro, F., Iviii.
Barthius, 1 xxxv (2).
Bechert: edition of Manilius, xciv; dissertations, xvi (3), xvii (2), xix, lix, xcviii.
Bentley, R.: edition of Manilius, lxxxviii-xci; use of Cod. Gemblacensis, xvii; of Lipsiensis, xvii; of Venetus and codd. dett, xliii sqq.; Trinity College copy of Manilius with autograph notes and collations by Bentley, xvii ( 1 ), xlvii sqq.; see also lxxiv ( $\mathbf{r}$ ), lxxxii, lxxxiii, lxxxvi, xciv.
Bentley, R. (nephew), xliii.
Bernard, Dr. E., xliii-xliv, xc.
Bitterauf, xcix.
Blass, H., xxxviii.
Boeclerus, xvii (6), lxxxiv.
Boethus, Stoicus, 1xi (I).
Boetius, lix-lxi.
Boll, lxxii (2), lxxxii (r).
Bologna edition of Manilius, Ixxvi.

Bonincontrius: family and fortunes, lxxvii; edition of Manilius, lxxv sqq.; other works, lexviii ; Codex Cassinensis of, lxxix; cf. lxxxi, lxxxii.

Bosius, xxxix.
Breiter: edition of Manilius, xciiixciv ; cf. xvii, xviii.
Burmann, xvi (3), xxxix.
Caesar, J., lxv, lxvi.
Capricorn, horoscope of Augustus, lxii-lxiii, lxvii.
Carrio, xvi, xli.
Carthaginian, Manilius not a, lix.
Casaubon, xvi (3), xli, lxxxiii (2), lxxxiv (6).
Cassander, lxv.
Cassinensis, Codex, lxxix.
Cassino, Monte, Abbey of, Ixxix.
Catalecta, Scaliger's, lxxxiii (3), lxxxiv (6).
Catasterism, lxvi.
Cato, lxv.
Catullus, lxxxiii (3).
Cicero, lxv.
Clark, A. C., xxiv-xxvi.
Clusius, xlvi.
Colomesius, lxxxiv.
Constance, xxiv, xxvi, xxvii, xxviii, xxix.

Cornelius, Cn., Hispalus, lxv.
Cramer, A., xcvi-xcvii.
Crassus, lxv.
Creech, Translation of Manilius, lxxxvii-lxxxviii.
Cusanus, Codex, xv, xliv, xlviiixlix, lv.

Daniel, Vergil of, xli.
Darwin, xcix.
Demosthenes, Ophthalmicum, lix.
Dousa, collation of MS. of Manilius, xl. Drusus, Libo, conspiracy of, Ixiv. Dulcinius, lxxix.

Edd. Vett. of Manilius, lxxv-lxxx.

## INDEX TO INTRODUCTIONS

é $\kappa$ тúpovaıs, xcvi.
Ellis, Noctes Manilianae, xciv ; collation of Codex Matritensis, xviii ; on the Vossian MSS., xlv ; see also xv (3), xxviii, xliv ( $\mathbf{r}$ ), xlv, lx, lxii, xcviii, xcix.
Engelmann, xxxvi (2).
Fabricius, Ixxvi.
Fayus (M.Du Fay) : edition of Manilius, lxxxvi, xcii.
Feller, xvii.
Festus, lxxxiii (3).
Ficino, Marsiglio, lxxv, Ixxviii.
Firmicus, 1xxii, 1xxiii (2).
Florence, xxviii.
Florentinus, Codex, lxxv.
Freier, B., xcvi.
Galeotto, xv.
Gall, St., xxxviii.
Gauricus, L., lxxviii.
Gellius, lxvii (x).
Gemblacensis, Codex: history of, xvi-xvii ; original of, xviii-xix; relation to $L+M$; use of by Scaliger, xvi-xvii, lxxxiv; by Bentley, xvii ( 1 ) ; Thielscher's paper upon, xxxi-xxxiii.
Gemini, horoscope of poets and astrologers, lxi.
Geminus, $1 \mathrm{xi}(\mathrm{x})$.
Gerbert; see Sylvester.
Germanicus, xcvi, xcix.
Gifanius, xvi, xxxix.
Gillot, xli.
Gracchus, lxv.
Graevius, xvii.
Gran, library of, xv.
Gronovius, J. F., xlvii, liv, lxxxv (2).
Guarino, xxxv.
Haruspices, Etruscan, lxvii.
Haupt, M., lxxx (4), lexxix (1).
Heinsius, D., lxxx, lxxxi (3).
Heinsius, N., 1xxx-lxxxv (2).
Holkham MS. of Manilius, xv, xlvii, lv, lvi.
Holywood (Sacroboscus), lxxix.
Horace, 1xii, lxviii.
Houllier, xl.
Housman: edition of Book II of Manilius, xcv; on interrelation of MSS., xxvi-xxxiii ; on Boetius, lx ; on date of Manilius, lxii-lxiv; on archetype of Manilian MSS., xx ; on Aldine edition of Manilius, lxxx ; cf. xvii (4), xviii (3), xxii, lxxxviii, xci.

Huet: Animaduersiones in Manilium, lxxxvi-lxxxvii; upon Manilius' ignorance of astrology, lxxi; cf. lxxxi.
Hungarian family of Manilian MSS., xv, lv-lvi, lxxv.

Insulanus (de Lisle', xl, lxxviii-lxxix. Interpolations in Manilius, xxii-xxv.

Jacob: edition of Manilius, xcii-xciii ; upon archetype of Manilian MSS., xix-xx; upon Vossianus Tertius, xlvi ; cf. lxxxv.
Janus Pannonius, lxxv.
Julia, lxii.
Junius, F.: Variae Lectiones, lxxxiv; cf. xl, xli, lxxxii (2), xcii.

Kant, lxxi.
Kleinguenther, xciv ( $\mathbf{I}$ ), xcviii, xcix.
Klotz, xxv.
Kraemer, lix, lx, xcvii, xcviii.
Krohn, xxv.
Lachmann, lxxxiii, xevi.
Lannoius, lxxxii (2).
Lanson, lix, xcvi, xcvii.
Laurentianus, Codex, lxxv.
Leoni, xlii.
Libra: horoscope of Augustus, 1xiii ; of Tiberius, $i b$.
Lindenbrog, xl .
Lipsiensis, Codex : history of, xviixviii ; original of, xviii-xix ; relation to $G$ and $M$, xxxi-xxxiii; Thielscher's estimate of, xxxixxxiii.

Lipsius, xl, xli, lxxxv ( $\mathbf{x}$ ).
Loewe, xviii, xxxiv (2).
Lucretius, lxx, lxxiv.
Madan, F., xxxv.
Maecenas, 1xvii, 1xviii.
Manilius : name, lviii-lxi ; birth, lxi ; date, 1xi-lxiv; characteristics of his poetry, lxx-lxxii, lxxiv; edict of A. D. 16, 1xiv, lxxii.
Marcianus, Codex, xv, xliv, xlix, livlv.

Marians, lxv.
Matritensis, Codex : collations of, xviii; relation to archetype, xxvxxvi, xxxvii-xxxix; value of for criticism, xxvi-xxx; history of, and connexion with, Poggio, xxxiv-xxxvii; interpolations in, xxvii ; marginalia in, xxvii (2).
Melillo, xcix.

## INDEX TO INTRODUCTIONS

Moeller, xciv ( I ), xcix.
Molinius, lxxx.
Monanthveil, H. de, xli, lxxxiv (6).
Morel, F., xl.
Mueller, E., xcix.
Muratori, lxxvi.
Naples editions of Manilius, Ixxvilxxvii.

Nicolaus (Niccoli), xxxv-xxxvi.
Nigidius Figulus, lxvi-lxvii.
Norden, xciv (1).
Octavius, Cn., lxv.
Ofen, library of, xv.
Ovid, 1xviii, lxxiv.
Padua, xlii.
Panaetius, lxv.
Patisson, xl.
Pierleoni, xcix.
Pingre: edition of Manilius, xcii; judgement of Bentley, xc (I).
Pithou, P., xxxix, xliii-xliv.
Plato, lxv, lxxv.
Poeni, lviii.
Poggio, xxvi, xxvii, xxxiv-xxxix.
Politian, xlii-xliii, lviii.
Pompey, lxv.
Posidonius, lxvi, xcix.
Postgate: Silua Maniliana, xcivxcv.

Propertius, lxviii, lxxxiii (3).
Pruckner, lxxx.
Ptolemy, lxxxiii (3).
Purbach, lxxv.
Puy, A.du, xl.
$P u y, C . d u$, xl, lxxxiii (3).
Quirinus, lxiii.
Rainard, lviii.
Ramorino, F., xcix.
Regiomontanus, xv, lxxv-lxxvii.
Reichenau, library of, xxxviii.
Riario, lxxviii-lxxix.
Richer, 1x.
Richter, xvii.
Rigault, xli, lxxxiv (6).
Sabbadini, xlii, lviii (5).
San Miniato, lxxvii.
Scaliger, J. C., Ixxviii.
Scaliger, J. J.: editions of Manilius, lxxx-lxxxiv; character of his scholarship, lxxxi-lxxxiii ; references to Manilius in correspondence of Scaliger, xxxix-xli; Emendatio Temponum, lxxxiii ; see also xvi, xliv, xlvi, lxxxvi, lxxxvii, lexxix, xciv.

Schoner, lxxviii.
Scylax, lxv.
Sforza, $F$., Duke of Milan, lxxvii.
Sherburne, Sir E.: edition of Manilius, Book I, lxxxv ; cf. xliii-xliv.
Sigebert, Chronicon, xxxiv.
Sigismund, Emperor, lxxvii.
Silius Italicus, xxxviii-xxxix.
Skutsch, lxxii (2).
Sonnenschein, E. A., lxxxviii (r).
Sorbonne Catalogue, lx .
Spanheim, xlvi.
Stadius, xl, lxxx (4).
Statius: Siluae, xxv, xxxiv-xxxix; Theb. and Ach., xxxviii.
Stellio, xvi.
Stillingfleet, xc.
Stoeber: edition of Manilius, xci-xcii, xcii (1); see also xvii (3).
Stoecker, xcviii.
Stuart, C. E., xviii.
Sulla, lxv.
Susius, xvi.
Sylvester II, Pope, lix, lx.
Tacitus: judgements upon astrologers, lxiv, lxix.
Theagenes, lxvi, $1 x$ viii.
Thielscher, xv (2), xvi, xvii, xix, xxxi-xxxiv, xlvii, c.
Thomas, P., xvii, xcvii, xcviii.
Thrasyllus, 1xiii-1xiv, 1xviii.
Tiberius, $1 x$ viii, xcvi, xcix.
Tibullus, lxxxiii (3).
Transpositions in the text of Manilius, xx, xxii, lxxxi.
Traube, xvi, xliii.
Troyes, xliv.
Ulpian, lxiv (2).
Valerius Flaccus, xxiv, xxv.
Varro, lxvi.
Velser, xli.
Venetus, Codex, xxxii, xlvii-lv.
Victorinus, lix.
Vierschrot, xvii (6).
Virbius, xli.
Virgil, lxvii.
Vitezius, xv.
Vollmer, xxv.
Vossianus, Codex, xlv-xlvi, lv-lvii.
Vossius, I., xliii.
Walker, C. T. H., xvii.
Webb, E. J., Ixxxviii (1).
Woltjer, J., xcvi.
Wouvver, J., xxxvii (2).
Ziegler, xviii.

## INDEX TO COMMENTARY

(The numerals refer to lines.)
acies and acne 372.
Aetna 49.
anastrophe 905.
Andromeda, acc. Andromedan 27, 365.
àторроаі 352-7.
Aratus 25.
arcus: in arcum 153; sub arcu 552.

Arquitenens 187-8.
Asclepiades of Myrlaea 150-269. aspects, theory of 270-432.
association, polygonal and parallel 468-519.
astrological instruments 282-3. Augustus, horoscope of 509.
auersus and aduersus 153, 201.
bella privata 541-69.
Calendar, Julian and Pre-Julian 509.

Callisto 29.
Capella 30.
captare 496.
cardines 864-970.
censeo 226.
census 69.
chaos 13.
Chelae 258.
circle of Geniture 788-807.
cognatio 67.
communis 242.
contractus 252.
contraria signa 395-432.
Cynosura 30.
declinare 797, 908.
detergere 908.
diametric association 395-432.
dícare 193.
dodecatemories 643-93, 693-722 ;
methods of finding 722-37; dodecatemories of dodecatemories 738-49.
eccentricity of sun's orbit 201. elision, rules of $136,747,937$.
Erigone (ratione duplex) 175.
fides 130 ; fidei 605.
figura 383, 454 .
Fortuna 890.
friendships of Zodiacal signs 466-519.
fulcimina (fulmina) 892.
genitives in $-i$ and $-i i 740$.
genus 151.
Gratius 43-5, 55.
Greek forms in Latin Poetry 365.
Hesiod 12-19.
hexagonal association 358-84.
Homer $1,7$.
ianua Ditis 951.
imago (sub imagine) 672.
inclinare 372.
instruments, astrological 282-3.
inversion (of order of words) 157.
latus (in latus ire) 255 .
Libra 251.
Macer, Aemilius 43-5, 55.
magic 46-8.
Mercury, as founder of astronomy 945.
mundus 63 .
ne 423.
necromancy 46-8.
nota 944.

## INDEX TO COMMENTARY

octotopos 864-70, 968-70. ostreae 93-4.
-osus, adjj. ending in, 224.
pars 965.
pectus amicitiae 582.
plays on Words 420, 926.
porta laboris 870 .
Posidonius 60, 90-2.
providentia 69.
quadrangular association 287357.
-que misplaced 722.
quicquam ('to some extent') 383. quin, corruptions of in MSS., 358.
quod 20, 534-5.
quoi 7.
ratio ( $=$ ópOòs $\lambda$ óyos) 131 ; deus et r. 82.
schematism of signs 270-432.
scopulosus 224.
sensus 501.
sexta signa 391.
sidera (signa, astra, stellae) I19.
signata (sinuata) 339.
sodalitia 599.
spicifer 442.
spiritus 64.
spondeiazontes 678 .
stella 119, 401.
Stoics 63, 83, 104, 114.
stupeo, with acc. 787.
subeuntia 371, 380.
subiuncti 326.
supinus 872-4.
Taurus 152-3.
templum 354.
tempora 780.
tertia signa 374.
Theocritus 39-40.
tides 90-2.
Titans 15.
triangular association 270-87; stronger than quadrangular 352-7.
triquetris 472-4.
tutelae: (a) of signs by monthgods 433 ; (b) of parts of body by signs 453-65.

Valgius 43-5.
ueneranda sors 887 .
$1+2$

## 14 DAY USE RETURN TO DESK FROM WHICH BORROWED LOAN DEPT.

This book is due on the last date stamped below, or on the date to which renewed. Renewals only: Tol. No. $642-3405$
Renewals may be made 4 days prior to date due. Renewed books are subject to immediate recall.


INTERLIBRARY LOAN
APR.131989
UNIV. OF CALIF, PERK.
$\qquad$
$\qquad$

LD21A-20m-3,'73
(Q8677810)476-A.31

General Library
University of California Berkeley

## YC 00490

## 226310


[^0]:    ${ }^{1}$ Opuscula, iii, p. 43.

[^1]:    ${ }^{1}$ All save the folio sine loco et anno (of which there is no copy in England, and, so far as I know, only one in Europe; the second Neapolitan (a mere reprint of the first); and the second edition of Prückner (substantially the same as the first).
    ${ }^{2}$ For the readings of Molinius I depend upon Jacob, occasionally verifying him where I had a doubt, and once or twice correcting him.

[^2]:    ${ }^{1}$ For fuller detail see my note in C. Q., 1909, pp. 54-5.
    ${ }^{2}$ Thielscher, Philologus, 1907, p. 116; Rh. Mus., 1907, p. 46 sq.
    ${ }^{3} V^{2}$ for I. I to II. 683 follows the Belgian recension (see Ellis, Hermathena, 1893, p. 267).

[^3]:    ${ }^{1}$ Bechert for some reason denies this : loc. cit., p. 9. Yet I have before me a copy of Scaliger's second edition which once belonged to Scaliger himself, and subsequently to Bentley, in which is written in Bentley's hand 'MS. Gemblacensis a me denuo collatus'. See Introduction, pp. xlvi-xlvii. If Bechert could not know of this, he could at any rate have known of Bentley's own words in Letters, cxxxi, p. 366 sq. : 'ipse oculis meis diligentissime olim perlustravi Gemblacensem et minutissimas quasque variationes scrupulose notaui.' Or, again, he could have read p. xiv of the Praefatio to Bentley's edition. Instead of this he bases his statement on a note of Stoeber at IV. 637. Some other errors in Bechert's account of $G$ are noted in Thomas' Lucubrationes.
    ${ }^{2}$ Jacob, Praef., vii-viii.
    ${ }^{3}$ Philol., 1907, p. 126.
    ${ }^{4}$ The library number is given wrongly by Housman, Praef., vii.
    ${ }^{5}$ Bentley, Manil., Praef., p. xiv ; Epp., cxxxi, p. 366 ; cxxxix, p. 385.
    ${ }^{6}$ Bentl., Epp., xxi, p. 44 ; J. Vierschrot also collated it. See Stoeber, Praef., p. 16 ; Bechert, C. R., 1900, p. 302. Richter's collation may still be seen in the British Museum, in a copy of ed. Boecleriana.

[^4]:    ${ }^{1}$ Phil., 1907 , p. 126.
    ${ }^{2}$ C. R., 1893 , pp. з10 sqq., 356 sqq., 406 sqq. ; 1894, pp. 4 sqq., 138 sqq., 289 sqq. ; Hermathena, 1893, pp. 26i-86.
    ${ }^{8}$ Housman, C. Q., Oct., 1907, pp. 290 sqq.
    4 A part of them has since been published, C. O., 1909, p. 3 IO.
    ${ }^{8}$ Some further account of $M$ will be.found in the Note at the end of this section.
    $\therefore$ It is true that 73 r and 733 begin with the same word, adde; but even omissions so caused occur most easily at the end of a page.

[^5]:    ${ }^{1}$ e.g. on I. 530-6ır. The leaves of $A$, again, were certainly not 'duplicata', nor was it written litteris quadratis.
    ${ }^{2}$ Leips. Stud., 1870.
    ${ }^{3}$ Notes on I. 355, 398, 529, 563.
    ( Philol., 1907, pp. 129 sqq:
    ${ }^{6}$ Housman : note at I. 529.
    ${ }^{6}$ I at one time thought that a page of 44 lines ( 88 lines to the folium) in double columns would best explain these figures. To this suggestion, put forward casually in a footnote in the C.Q., ii. 126, I was largely led by a consideration of certain facts (mentioned below on p. xxv) in connexion with $M$-facts which I now interpret differently. The assumption of a page of 44 lines involves the hypothesis that two separate folia in $A$ (and these not consecutive) had been accidentally detached and become, in replacing, inverted.: The hypothesis which I now adopt will be seen, I think, at once to be infinitely more simple and more probable.

[^6]:    ${ }^{1}$ It follows that the transposition which Scaliger detected (809-12 follow in $G L M$ on 804) had not yet been accomplished in $A$. (I number the lines here according to Breiter's text.) But there must have been (to explain the existence of the transposition in GLM) signs in $A$ indicating that the lines should be transposed.

[^7]:    ${ }^{1}$ The following considerations may suggest the explanation of this: the last words of 318, 319, $3^{20}$ respectively are trigona, trigonas, quadrata; the last words of 342 and 344 respectively are trigonis, quadrata. The scribe's eye when he got to trigonis in 342 (end of 29 v ) wandered to the end of 29 r . See table following as well as my note at 649-50.
    ${ }^{2}$ I include $43^{2}$ in this calculation, imagining it to have usurped the place of a genuine line.
    ${ }^{3} 63 \mathrm{I}$ is not in the MSS.

[^8]:    ${ }^{1}$ See C. Q., 1908, p. 180 ; and uide Jacob ad loc.
    ${ }^{2}$ Krohn's case rests really upon two passages. At Siluae iv. 3. 79 is found a marginal correction which belongs to iv. 3. 35. At the end of v. I. 8I the word arctos has crept in from v. I. 127 (of which it is last word), ousting the true reading auster. I explain both these accidents by supposing a leaf of 44 lines ( 22 lines to the page) of which the margin had been torn,

[^9]:    ${ }^{1}$ They represent, perhaps, marginalia of $M$ 's original. This would explain their absence from GL. They may have come into $A$ after $A$ had been copied by the common source of GL.

[^10]:    ${ }^{1}$ Cf. Verg. G. ii. 6 'spumat plenis uindemia labris'. despumat has been imported perhaps from Verg. G. i. 296.
    ${ }^{2}$ Cf. M. Arnold, The Strayed Reveller, Poems, p. 209 (1893, I vol.) :
    Or where the echoing oars
    Of Argo first
    Startled the unknown sea.
    xxviii

[^11]:    1 This is one of a number of passages where $L$ is in sincerity superior to G. Others are-From Book I: 229 toto. 745 reserentia. In Book III : 332 limitet. 337 nam. 420 demit. 604 formå et. 680 quidem. In Book IV : regni] regi $L$ : rei $G$. Yet occasionally $L$ will be found less sincere than either $G$ or $M$; e. g. II; 495 in mutua $G:$ in muta $M:$ immutaque $L_{\text {i }}$

[^12]:    ${ }^{1}$ Praef., p. xxxi.
    2 Philol., 1907.
    ${ }^{3}$ Bursian's Jahresbericht, 1908, pp. 234-51, Abt. ii.
    4 Now and again. $L^{2}$ alone among our codices has the true reading : e.g. in Book II. 533 tergore cedit, 600 populo.

[^13]:    ${ }^{1}$ Thielscher's position is based upon two assumptions: ( $\mathbf{I}$ ) that $L$ was written before $G$ : but here the evidence does no more than at most to show that $L$ is probably not later than $G$; (z) that, where $G$ has in its text the readings of the corrector of $L$, it depends for those readings actually upon $L$. At the best this could be only a likely presumption. But this presumption is rendered very weak indeed by ( I ) the number of true readings peculiar to $G$; (z) the agreements between $G$ and the Codex Venetus, of which I give an account in Introduction, II, pp. xlvii sqq. How will Thielscher explain the fact that, to take one example, at 820 G Ven. have cordibus, $L$ has torridus? (3) by the frequent disagreement of $G$ and the corrector of $L$. It is perhaps worth while to note here some places where $G$ does not offer the correction which stands in $L$. I. i30 sumptum $L^{2}$ : summum $G L^{1} M$. 140 *creentur $L^{2}$ : creantur $G L^{1} M$. 163 strixerunt $L^{2}$ : *struxerunt $G L^{1} M$. 265 nocantem $L^{2}$ (uoluit nocentem) : *uocantem $G L^{1} M$. 365 *hunc $L^{2}$ : tunc $G L^{1} M . ~ 470$ * conditur $L^{2} M$ : ceditur $G L^{1}$. 514 lustrarat $L^{2}:$ lustraret $L^{1}$ : *lustrarit $G$ : lustrari $M$. 520 *puncto $L^{2} M$ : ponto $G L^{1}$. 582 cingens $L^{2}$ : tingens $L^{1}$ : tangens $G:{ }^{*}$ timens $M$. $616{ }^{*}$ uestigia $L^{2} M$ : fastigia $G L^{1} . \quad 712 *$ findens $L^{2} M$ : fingens $G L^{1}$. $\quad 726$ fissuram $L^{2}: *$ fusuram

    * The asterisk denotes in each case the true reading or the reading nearest to truth.

[^14]:    ${ }^{1}$ C. $R$., xiii, 1899, pp. 119 sqq.
    ${ }^{2}$ I now find it noted by Loewe apud Breiter, Manilius I, Praef., p. v.

[^15]:    ${ }^{1}$ This photograph, with others I shall mention, was very kindly lent to me by Mr. Clark.
    ${ }^{2}$ Valerius and Asconius are conjoined because they were found together:

[^16]:    ${ }^{1}$ Whether Poggio is in Constance or in England everything goes to Nicolaus via Barbaro. This is because Barbaro was in Venice, and letters, \&c., followed the great trade route by way of Innsbruck. Even from England the trade route was largely overland: Poggio's mail would not go direct by sea to Venice. Poggio sometimes sends letters via Pisa : this also was an important post town. In any case foreign letters for Florence would naturally be directed in the first instance to some reliable person in Venice.
    ${ }^{2}$ See, however, Engelmann, De Stati Siluarum Codicibus (Leipsic, 1902), pp. 25 sqq. Engelmann takes Poggio's grumblings too much au pied de la lettre ; and Epp. i. 2-29 really tells against his position.

[^17]:    ${ }^{1}$ The first leaf is, however, missing.
    ${ }^{2}$ Thielscher has unfortunately made his calculations almost meaningless by printing ' x seniones' for ' $x$ seniones'. It took me a week to discover that ' $x$ seniones' stood not for ' 10 seniones' but for an unknown quantity of seniones.
    ${ }^{3}$ Clark, on the other hand writes, in C. R., 1899, p. 127, 'It is not likely that Manilius and the Siluae were found in one MS. together with Silius Italicus.'

[^18]:    ${ }^{1}$ See pp. xxv sqq.
    ${ }^{2}$ See above, p. xvi.

[^19]:    ${ }^{1}$ It was at Padua that Politian saw this MS., not at Mantua, as Mr. Clark says, by an error, in C. $R ., \mathrm{xx}, \mathrm{p} .227$.
    ${ }^{2}$ The Venice edition did not appear until after Politian's death.
    ${ }^{3}$ According to Sabbadini, Scoperte, pp. 169-70, 'uetustissimus', in Politian's usage, is an epithet reserved for MSS. prior to saec. ix.
    ${ }^{1}$ Le Scoperte dei Codici Latini e Greci ne' secoli XIV e XV, p. 170. On the whole subject cf. ib., pp. 154-5, 169-70.

[^20]:    ${ }^{1}$ Philologus, 1907, p. 122.
    ${ }^{2}$ p. xiv.
    ${ }^{2}$ i. e. the Bodleian MS. ; see below, p. xlvi.

[^21]:    ${ }^{1}$ Strangely enough, Pithou makes a similar blunder in an Antwerp edition ( 1567 ) of Maximianus mentioned by Ellis, C. R., 1901, p. 369 b : 'contuli cum MS. Puteanorum fratrum Lutetiae mbexi Kal. Sep. Petrus Pithoeus.' Scaliger, Epist., 1627, p. 158, mentions Pithou's death as occurring in November, 1596.
    ${ }^{2}$ P. Pithou seems to have had a MS. of Manilius in his possession in 1573. Tamizey de Larroque in his Lettres françases inédites de Joseph Scaliger (Paris, 188r) publishes two letters of Scaliger (iii-iv, pp. 21 and 26), dated ${ }^{1573}$, to P. Pithou, in which Scaliger says that he learns from François Pithou that Pierre has an ancient MS. of Manilius. He asks for the loan of this. But I cannot anywhere find that he received it. The Latin letters to Pithou in the 1627 edition contain no reference to Manilius at all.
    ${ }^{3}$ See Thielscher, Rh. Mus., 1907, p. 485.

[^22]:    ${ }^{1}$ Omitted also by $M$ : on the significance of this omission see Thielscher, l. c. His explanation applies also to II. $524 \mathrm{om} . \mathrm{M}$ Cus. (independently).
    ${ }^{2}$ The titulus to Lib. II 'M. Manili mathematici' shows that $V^{3}$ is not wholly free from the 'Italian' influence.

[^23]:    ${ }^{1}$ See above, and cf. Monk, Life of Bentley, p. 27.
    ${ }^{2}$ Bentley's Manilius, Praef., p. xiv.
    xlvi

[^24]:    ${ }^{1}$ Praef., p. xiv.
    ${ }^{2}$ Rh. Mus., 1907, pp. 46 sqq.
    ${ }^{3}$ ib., probably plut. xvi, since the other is merely described as antiquo charactere, which may mean no more than the Italian fifteenth-century lettera antica.

[^25]:    * The asterisk in each case indicates that the reading of Ven. $M$ is here false.

[^26]:    ${ }^{1}$ For the relation of these MSS. to $M$ see C. Q., i. 4, p. 297, iii. 1, pp. 57-9; Breiter, Praefatio, pp. vi-vii. The relation of $\mu$ to URH must remain uncertain till that rather inaccessible MS. has been examined.

[^27]:    ${ }^{1}$ C. Q., 1909, p. 58 ; cf. C. R., xiii, p. 125.
    ${ }^{2}$ L'Enfant, Poggiana, ii. 3 I4.
    ${ }^{3}$ The titulus of $M$ is in a seventeenth-century hand.
    ${ }^{4}$ i. e. Astronomican. Scaliger at i. titulus, and Comment. p. 5 has misunderstood this Greek genitive.
    ${ }^{6}$ See above, pp. xlii-xliii ; Sabbadini, Le Scoperte, \&c., p. 169. I. del Lungo's Prose Vulgare, to which Sabbadini refers, I have not been able to see. (The Bodleian has no copy.)

[^28]:    ${ }^{1}$ Kraemer, Ort u. Zeit der Abfassung der Astronomica des Manilius, Frankfort, 1904, p. IO; see below, p. xcviii. Scaliger's remarks, Proleg., pp. 2-3, on the same subject are excellent and unanswered.
    ${ }^{2}$ See IV. 4I. ${ }^{3}$ De Manilio, \&c., p. 10.
    ${ }^{4}$ De Manilio poeta eiusque ingenio, p. 9, Paris, 1887.
    ${ }^{6}$ Havet, Lettres de Gerbert, p. 117, 'te solo conscio,' because astrology was a science forbidden to the vulgar in this period. See Cumont, Astr. Cat. 5, p. 85.
    ${ }^{6}$ Havet, ed. cit., p. 6.

[^29]:    ${ }^{1}$ N. M. 230.
    ${ }^{2}$ Introd., pp. 1xix, lxxii.
    ${ }^{3}$ See particularly Ellis, N. M., p. $230 . \quad$ © C. Q., 1909, p. 56.
    ${ }^{5}$ Histt., ed. Waitz, 1877, iii. 46.
    ${ }^{6}$ See Excursus III in W. v. Voigt's paper (Philologus, 1899, pp. 171 sqq.), Unter welchen Gestirnen wurden Caesar Agrippa und Tiberius geboren? I had not seen this paper when I wrote in $C . Q$.

[^30]:    lx

[^31]:    ${ }^{1}$ Is it just possible that we have here some confusion with the Stoic Boethus? Geminus at Isagoge, xvii, §48, speaks of Bó $\boldsymbol{\theta} \boldsymbol{0}$ os ò фı入óvoфos
     Aratus (with which Manilius could have been concerned only in Book I) Boethus wrote also, as we know from Diogenes Laertius, treatises $\pi \in \rho \bar{i}$ $\phi \dot{\sigma} \sigma \omega \omega$ and $\pi \epsilon \rho i$ ei $\mu a \rho \mu \epsilon \dot{\varepsilon} \eta \eta s$. On either of these works Manilius might have drawn in Books II and III. With the remark, attributed to Boethus, that
     Maass, p. 83, 28-9), it is interesting to compare Manilius II. 1-38. All that is known about Boethus may be seen in Maass' Aratea, pp. 152 sqq., and Pauly-Wissowa's Real-Encyclopädie, iii, pp. 602-3.

[^32]:    ${ }^{1}$ Truly I think, so far as the spice of personal satire goes; but I am not clear that Manilius, while flattering Augustus elsewhere, might not occasionally allow himself such covert satire. Augustus was not a Tiberius.

[^33]:    ${ }^{1}$ Tac. Ann. ii. 32.
    ${ }^{2}$ Ulpian, Mos. et Rom. Leg. Coll. xv. 2, places this edict in the consulship of Pomponius and Rufus-i. e. A. D. 17.
    ${ }^{8}$ Tib. 36.

[^34]:    ${ }^{1}$ R. R. i. 5. 4.
    ${ }^{2}$ Val. Max. 1-3, 2-3; and with them Jews-i. e. it was a $\xi \epsilon \nu \eta \lambda a \sigma i a$ only.
    ${ }^{3}$ De Div. ii. $99 . \quad{ }^{4}$ Mar. 42.
    ${ }^{5}$ Cic. De Div. ii. 99 ; Plut. Sulla, 37.

[^35]:    ${ }^{1}$ 35, 199. $\quad{ }^{2}$ Ciu. Dei v. $2 . \quad{ }^{3}$ Perhaps monitumque.
    ${ }^{4}$ Suet. Aug. 94 ; Dio xlv. r. The first part of Suetonius' life of Julius is lost. But Servius preserves from it similar prophecies at Julius' death nasci inuictum imperatorem (ad Aen. vi. 799). For Scribonius' prophecy concerning Tiberius see Suet. Tib. I4.
    © Suet, Aug. 94.

    - Swoboda, Nigidii Figuli Operum Reliquiae, Vienna, 1889.
    ${ }^{7}$ Plut. Romulus, ch. xii.

[^36]:    ${ }^{1}$ Gellius i. 9.6 'disciplinas altiores $\mu a \theta \neq \dot{\eta} \mu a \tau a$ ueteres Graeci appellabant : uulgus autem quos gentilicio uocabulo Chaldaeos dicere oportet, mathematicos dicit'.
    ${ }^{2}$ Dio xlix. 43 .
    ${ }^{3}$ Bouché-Leclerq, p. 550.
    Ixvii

[^37]:    ${ }^{1}$ The 'genius' of Horace, I would remark, is nothing but the Stoic $\delta a i \mu \omega \nu$ or $\begin{aligned} & \text { пnitponos, for which see Zeller, Stoics, \&c., p. 332, note } 3 .\end{aligned}$
    ${ }^{2}$ Od. i. 11. 2-3.
    ${ }^{3}$ Suet. Tib. 14.
    ${ }^{4}$ Juv. x. 94.
    ${ }^{5}$ Suet. Tib. 36.

[^38]:    ${ }^{1}$ Ann. vi. 22.
    lxix

[^39]:    ${ }^{1}$ Sce e.g. II. 581-607.

[^40]:    ${ }^{1}$ II. 60-7.
    ${ }^{2}$ II. 108.
    ${ }^{3}$ II. $155^{-16}$.
    1xxi

[^41]:    ${ }^{1}$ Boll's judgement is strangely exaggerated-'dass der begeisterte Dichter des Gestirnten Himmels weder diesen noch einen Globus jemals ernstlich angesehen und gar verwertet hat' (Sphaera, pp. 383-4).
    ${ }^{2}$ See Boll, Sphaera, l. c. ; Skutsch, Firmiciana (Rh. Mus., 1910, pp. 627 sqq.). Skutsch illustrates in a very striking manner the close dependence of Firmicus in Book VIII upon Manilius V.
    ${ }^{3}$ See Breiter, Die Planeten bei Manilius (Philologus, 1xiv, pp. 154 sqq.). 1xxii

[^42]:    ${ }^{1}$ The view of the Middle Ages is clearly expressed in Ambrosiaster's dictum: 'Nihil tam contrarium est Christiano quam si arti matheseos adhibeat curam.' For its legal formulation see Cod. Theod. 9. 16. 4 ; 9. 16. 6.
    ${ }^{2}$ It seems to me likely, though no one has made the suggestion, that the number five was determined for Manilius by the number of the planets: just as Firmicus regarded his eight books as i + vii (seven planets); Mathesis, viii. 33 'hos libros ad septem stellarum ordinem numerumque conpositos'.

[^43]:    1 'A certain critic of our times (i. e. Bentley) maintained that Ovid and Manilius were the only two poets that had wit among the ancients': Boyle's Examination, quoted by Monk, Life of Bentley, p. 27, q. v.; cf. Bentley, Phalaris, 337-8.
    ${ }^{2}$ See Boll, Sphaera, p. 379.

[^44]:    ${ }^{1}$ C. Q., iii. 1, pp. 54-5. ${ }^{2}$ Muratori, R.I. S., xxxi. 4.
    ${ }^{3}$ In Book II we owe to Regiomontanus the true reading in some thirty places; but the corrections are mostly trivial, and some come possibly from the codd. dett.

[^45]:    ${ }^{1}$ Comment., p. 4.
    ${ }^{2}$ See pp. 155 sqq.
    ${ }^{8}$ The folio edition sine loco et anno is the rarest of all the editions of Manilius-there exists perhaps only one copy, and there is no report of its readings which would help us to classify it.

    4 This I have not scen.

[^46]:    ${ }^{1}$ I have little doubt that he is prior to Bonincontrius.
    ${ }^{2}$ The reference is to the disastrous intrigue of the year 1437.

[^47]:    ${ }^{1}$ Raphael Riario, or Galeotto, to whom the Commentary is dedicated (perhaps the 'Cardinalem Quendam' of the Tractatus Electionum). He was born in 1451 and died in 522 .
    ${ }^{2}$ e. g. at iii. I. 42 he ends a pentameter with the word 'Heroides'.
    ${ }^{3}$ Gauricus forms an interesting link between Bonincontrius and Scaliger. J. C. Scaliger kept (aluit et fouit) two astrologers at his house, of whom Gauricus was one and Pomponatius another : Prima Scaligeriana, p. 107.
    ${ }^{4}$ Poet. vi. 3, p. 308, Venice, 1561, 'Argumento stylus est longe inferior. Non pauca tamen placere possunt.'
    ${ }^{s}$ See e. g. the chapter on Freewill.

[^48]:    ${ }^{1}$ Why Molinius has met with so much favour among modern editors it would be difficult to say. Cramer finds in him not above ten new readings; and I have never (save in one place) found a reading attributed to him in a modern Apparatus which I have not subsequently traced to some prior edition.
    ${ }^{2}$ Epist., 1627, p. 166.
    ${ }^{3}$ Oratio in Scaligeri Funere, pp. 1-2, Elzevir, Lugd. Bat., 1620.

    - But he avoids Heinsius' worst fault. 'Ganz frei ist Scaliger von der Sucht, an der schon zu seiner Zeit fast alle Kritiker, noch mehr nach ihm N. Heinsius und seine Nachfolger, krankten-von der Sucht, die Lateinischen eleganter zu machen als sie vor uns liegen. Dagegen mutet er ihnen zuweilen unerhơrte Härten zu oder Geschmackloses' (Haupt, Opusc. 'iii. 33). Nic. Heinsius is perhaps not to be acquitted of the narrow ambition which Scaliger censures in his letter to Joannes Stadius : 'nam gloriolam

[^49]:    ex nescio quarum uocularum commutationibus aucupari, angusti est animi'

[^50]:    ${ }^{1}$ See Scaliger himself, Proleg., pp. io sqq. ; Boll, Sphaera, p. 449.
    ${ }^{2}$ Junius and Lannoius are the most frequent objects of attack: see below, p. Ixxxiv, notes 3,4 .

[^51]:    ${ }^{1}$ It is his immortal achievement to have broken down the barrier between classical and biblical learning. 'Superstitieux jamais ne fut docte,' he said. It would be interesting to speculate how far the peculiar direction taken by Scaliger's scholarship was determined by his anti-Catholic prejudice.
    ${ }^{2}$ It was the Manilius which drew from Casaubon the generous admission that when he read Scaliger he felt like a mere child : Casaubon, Epist. 2, ed. Graev., 1566, p. 223.
    ${ }^{3}$ When he first took Manilius in hand I cannot discover. His Catalecta appeared in ${ }^{1} 573$. And from $E p$. iii-iv, de Larroque, it is clear that he was already then deep in Manilius. Yet between 1573 and 1577 he published editions of Ausonius, Festus, Catullus, Tibullus, Propertius; and in July, 1577, he writes to du Puy (de Larroque, Ep. xvii, p. 68) that he should already have finished Manilius but that he cannot procure a Greek text of Ptolemy's Tetrabiblos. He has only been able to read the work 'tourné barbarement d'Arabic'. (The same letter is interesting as revealing already the contempt Scaliger manifested later for the modern astrologers and mathematicians :- 'I know,' he writes, .' that there are to-day in France great genethliacs and mathematicians. But-between ourselves, av̉roì $\gamma^{\mathrm{c}} \rho \dot{\boldsymbol{\varepsilon}} \sigma \mu_{\dot{c}}^{\dot{v}} \nu-\mathrm{I}$ warrant it will take them all their time. ("je leur baille bon

[^52]:    ${ }^{1}$ Not only Housman but Ellis (Hermathena, 1908, p. 167) and Jacob (De Man., p. 3) speak of him with great severity. Already only eighteen years after his book had appeared, Creech had spoken of him as 'the miserable writched Fayus' (Creech, Pref., p. 15).

    * See Bernays, J. J. Scaliger; pp. 119, 199.

[^53]:    ${ }^{1}$ I can find in Book II only one true emendation: II. 366, 'auersaque Tauri'-an easy feat, after all.
    ${ }^{2}$ See the judgements upon him of N. Heinsius and Graevius in Burmann, Sylloge, iii. 835 ; iv. 4I, 75.

[^54]:    ${ }^{1}$ A just estimate of Bentley, by Bechert, may be seen in C. R., 1900, lxxxviii

[^55]:    p. 302 ; an unjust one by E. J. Webb, ib. xi, pp. 307 sqq. ; an apologetic one by E. A. Sonnenschein, ib. v. 379 sqq.
    ${ }^{1}$ 'Pentleio nihil saecula tulerunt in hac arte par aut secundum,' Haupt, Opusc. iii. 43.
    ${ }_{2}$ That he left much to be done by a competent successor Scaliger himself knew well : see Proleg. de Astrol. ad finem, Epist. 1627 (lii), p. 177.

[^56]:    - 1. If we except Scaliger, Pingre's judgement is just 'une édition qui fit oublier toutes les éditions antérieures'.
    ${ }^{2}$ See Introduction II, p. xlvi. It is a pity that Bernard has not found a place in Dr. Sandys' History of Scholarship.

[^57]:    ${ }^{1}$ I refer to the younger Bentley's confusion of $V^{3}$ and Codex Pithoer. Cf. Introduction II, pp. xliii sqq.
    ${ }^{2}$ Letters, pp. 36-7.

[^58]:    ${ }^{1}$ Jacob's judgement upon Stoeber is amusing and forcible: 'Ingenium autem eius hominis Terentius describit' (Heaut. Tim. v. 1.4), quae sunt dicta in stulto, caudex, stipes, asinus, plumbeus, in illum nil potest : exsuperat eius stultitia haec omnia.
    'Yet,' he adds, 'inuenti sunt qui eum sequi mallent quam Scaligeros atque Bentleios,' De Manilio Poeta, p. 2, b.
    ${ }^{2}$ Despite the fact that the signs of the Zodiac are made to revolve from left to right.

[^59]:    ${ }^{1}$ C. $Q .$, 1908, pp. 123 sqq.
    xciii

[^60]:    ${ }^{1}$ Occasional notes, as II. 788, are admirable. Loth text and commentary are praised discreetly by Moeller, Berl. Phil. Woch., 1910, pp. 493-9. Norden (Einleitung i.d. Altertumswissenschaft, i, p. 569) speaks of them as 'vollig unbrauchbar'. Yet Kleinginnther in D. L. Z., 1908, pp. 2077-81, writes: 'Durch ihren hohen wissenschaftlichen Wert tritt Br.'s Ausgabe den Arbeiten Scaligers, Bentleys und Pingrés würdig zur Seite '.
    ${ }^{2}$ As will be seen from my Introduction I.

[^61]:    ${ }^{1}$ C. ${ }^{2}$., 1908, pp. 123 sqq.

[^62]:    ${ }^{1}$ I pass by Jacob's Lubeck programme of which I have spoken elsewhere: (Jacob holds that I-IV of the Astranomica was written under Augustus, V under Tiberius.)
    ${ }^{2}$ That no part of this poem was written in the lifetime of Mugustus. Woltjer's position is, with some differences, the same as that of Jacob.

[^63]:    ${ }^{1}$ The opinions which I have offered upon pp. lxxv sqq. are, however, independent of Cramer; but for my data I have not gone much outside Book 11 .
    ${ }^{2}$ Lanson infers that Manilius was born in Asia from the geography of Book IV.
    ${ }^{3}$ Of the four emendations of Book II offered in the Lucubrationes two are, I think, true (23, 226).

[^64]:    ${ }^{1}$ Book I was written in A. D. 10, II in II, III in 12, IV in 13 , V in 14.

[^65]:    I aximus $L$ : Caximus $M \quad 2$ rerum $G^{1}$ : regnum $G^{2} \quad 3$ castra decem aestatum scripsi: castra ducum et caeli codd. ad i. 766 hectoreumque (haectoreumque $L$ ) facit codd. hoc loco: uictamque codd. ad i. 766 : tutamq. codd. hoc loco troyam $M \quad 4$ errorem in ras. $L$ quot GM rec. man. : quod $M^{1}: ~ q đ ~ L \quad 6$ captisque $L^{2}$ : capitisque $L^{1} M^{1}$ : captis $G M^{2}$ 7 patriam cui (quoi scripsi: cui iam Fayus) cura petentum Housman: patria quae iura petentem codd. post 7 sequitur in $M$ omnia peruolitans ex 66 8 cum Ven. dabit $M$ cuiusque : suprascr. ri ut sit riuusque $M^{2}$ profusos $L$ Ven. : profusus $M$ : profusas $G \quad 9$ latites $M^{1}$ : latices $M^{3}$ : lances $G L$ dixit $G$ ro amnemq. (v sup. n scr.) $M$ intenues $M$ diducere Markland: deducere codd. II bouis $G$ I2 diuos] diuosq. $L$ parentis $G L^{1}$ : potentis $M \quad 13$ cahos $M \quad 14$ cursus Bechert: corpus codd. 15 sones $L^{1} \quad$ iouis et $G$ : iuuisse $L M \quad$ I6 matre Hug: fratre codd. 17 bachum codd. 18 inmenso $L$ : uniuerso $M$ lumina dett. : numina (rumina $M^{1}$ ) codd. 19 quin] quiq. $G^{1}$ notauit $P$. Francius : notarit $G^{1}$ : rogarit $G^{2} L M^{1}$ : rocarit $M^{2} \quad 20$ quid (o suprascr.) $L^{1}$ amarit $G^{2}$ 2 I Pallas Creech : bachus codd. utrunque $G$, ut persaepe 22 adultera] et

[^66]:    ultra (marg. $M^{2}$ dulcia) $M \quad 23$ flumina $P$. Thomas : numina (rumina $M$ ) codd. $\quad 28$ Persea Scaliger : persi (parsi $M$ et marg. pars $M^{2}$ ) codd. Andromeden (-an dedi) poena Bentley: andromed(a)e poenas codd. solantemque Ven, solwenteme GLM 29 raptuque Bemly. raptamque codd. licaone codd 30 cinosuram codd. $3^{3}$ cignum $G L M$

[^67]:    $L^{1} \quad$ nudas $M^{1} \quad 60$ nanque $G$ naturam Bentley: naturae codd. $\quad{ }_{4}$ orationis (o- eras.) $G^{1} \quad 65$ aque (e inter a et q add. $M^{2}$ ) $M \quad$ inriget $M$

[^68]:    67 menbris GLM, ut saepe cotexta $G \quad 68$ inposito $M \quad 69$ mundi (cum ras. post -di) $L \quad$ censum Scaliger: sensum codd. $\quad 70$ ambitis $M$ regeret $M \quad 74$ aetherea $M \quad 75$ nubes in ras. $L \quad 76$ fontes $L^{2}$ : fontis $G L^{1} M$ omnes $L^{2} \quad 77$ par dett. : pars codd. partes $L^{2}$ : partis $L^{1} \quad$ aequod $L^{1} \quad 78 \mathrm{ut} 7$ et Ven. nude $M$ sideret Bentley: sidera et Ven. : sidera $G L M$ orbis Ven. $M$ : nobis $G^{2} L^{2} \quad 79$ minusque $G M$ 81 $\overline{\mathrm{dnmq}}$ : ( $\overline{\mathrm{dn}}$ in ras.) $L \quad 83$ aethereis Bonincontrius: aeternis codd. 84 summata $M$. 85 uita $L M \quad 86$ mentibus Ven. proprius $L^{1} 87$ nimis Bentley: $\operatorname{minis} G^{1}$ (teste Walker): minus $G^{2} L$ : munus $M$ querenda $M$ temptat $M \quad 89$ monet $M$ a terra $M$ inmittit $L M \quad 90$ hinc Ven. sidere Scaliger: sidera codd. 91 tenet Ven.: tenent GLM diuerso ed. Romana 1510 : diuiso codd. stimilatu $L M$ recessum $M$

[^69]:    92 nunc in ras. $L \quad$ spacium $M \quad$ commitata $L^{1} \quad$ uoluntatem $M$ 93 si $G L \quad 94$ uarian $M \quad 95$ tua Bentley: tum $M$ : cum $G L$ imitantur in ras. $L$ : mutantur $M \quad 96$ q̊q̊ $L$ perdis in oribus Bentley: reddis (recdes $M$ ) curribus (cruribus $L^{1}$ : cursibus Ven. : eocurribus $M$ ) codd. 97 hisdem codd. repperis $M$ reliquit dett.: relinquis (reliquis Ven.) codd. 98 refers dett.: refert codd. constans $L M$ ioo ignata $M$

[^70]:    125 comertia $L \quad 126$ prima $M \quad 127$ mutum $M \quad 128$ ac uelut $V$ en. 130 pontusque $M$ 131 unquam $G 132$ sequenda Fayus: secunda codd. ueris accredita scripsi : ac ueris credita codd. 134 faciat ratum $M$ : faciet $G^{1}$

[^71]:    135 fortis $M \quad 136$ flatum $M \quad 137$ turba Breiter: turbam (turba $L$ : turbe $M$ ) codd. carmine $L^{1}$ condam $G$ : quondam $M$ : quondā (quond- in ras.) $L \quad 138$ uectatur $L^{1} \quad 139$ liber agam Bentley: ubera tam $L^{1} M$ Ven. : umbrato $G L^{2} \quad$ currus $L^{1} M$ : curru $G L^{2} \quad$ illis $M \quad 140$ nec ptim $M \quad 141$ mirantibus $G$ : tyrantibus $L^{1}$ : gyrantibus (mi-sup. gy- scr. $L^{2}$ ) $L^{2}$ Ven.: rexantibus $M \quad 143$ ut quibus $M$ meatis $M \quad 144$ est om. $M$ 147 diuersa Scaliger ${ }^{2}$; aduersa codd. auras $G^{1} 149$ Lemma in $G$ (marg. minusc.), $L$ (marg. rec. man.), $M$ qu(a)e signa masculina sint qu(a)e feminina (feminin $M$ ) et qu(a)e humana: $L^{1}$ spatium duarum linearum reliquit 149 quoque compendiose scriptum in $L \quad 150$ et $G M: \mathrm{t} L \quad 152$ thauro (sed h punxit) $L \quad{ }^{1} 53$ certus in $M \quad$ auersus Scaliger: aduersus codd. redeundo om. $G^{1}$ : add. marg. rec. man. $\quad 154$ alternantq. $L^{1}$ moris $L M \quad 157$ quaedam Bentley: quae iam codd. 158 sorte $L^{2}$ : forte $G L^{1} M$ post hunc u. spatium unius lin. in $L$ : lemma in GLM quae

[^72]:    168 nichil $M$ exterius mirantur $G L^{2}$ : exterminantur $L^{1} M$ : extra minantur Ven. 169 amissumue dett. : admissumue (-que $G$ ) codd. dolens $L^{1} M$ quod] que $M \quad{ }^{1} 70$ adq; $L$ I7I ut $G L^{1}:$ ut qu(a)e $L^{2} M$ Capricornus et $G$ : Capricornus (et om.) LM intentum qui $M$ : qui intentum $L$ : hic qui intentum $G$ I72 hominis $M$ : oris $G L V e n$. priori $M$ Ven.: prioris GL ${ }^{1} 73$ est om. $M \quad{ }^{1} 74$ sunt $L^{1}$ duplicine scripsi: duplane (-ue $L^{2} M$ ) codd. $\quad 175$ erigore $M \quad$ I 76 ratione Bentley: ratio (racio $M$ ) codd. estas $M \quad 177$ autunnus $G$ (ut 189 et alibi) utrique $L^{2}$ : utrūque $L^{1} M$ 178 iccirco $G$ pecedunt $M \quad 180$ duplices $L^{2} M$ retinent Regiomontanus: retinet codd. coñexo $M$ 18ı et Ven. quos Regiomontanus : quod codd. per] super $L^{1}$ : supra Ven. 182 ex ed. Bononiensis: et $G L:$ e $M$ ueris dett. : uiris $M$ : uires $G L$ 184 q3 suprascr. q $G$ colorem LM 185 ueris Dulcinius: uires codd. at Scaliger: et codd. 186 aestatis $G L^{1}$ : aetatis $L^{2}:$ aeratis $M \quad$ par $M$ : pars $G L \quad{ }_{187}$ quinetiam Bentley: nec iam $G^{1} L^{1} M$ : nec non $G^{2} L^{2}$, cf. 505 arcitenens $G \quad$ qui (cum ras. : fuit quin?) $G \quad 189$ uendicat arcus $M \quad$ Igo

[^73]:    hominis $M$ : oris $G L \quad$ fera ergo $M$ : ferentem $M$ IgI nunc iamque $G$ : nunciãq; (c in ras.) $L$ : nunciaque $M \quad 192$ munit $M \quad 193$ ducant $L^{1}$ 194 reuoluans $M \quad 195$ uernis $M$ : uertus $L^{1}$ : uer tunc $G L^{2}$ roribus dett. : roboris codd. umbres $M \quad 196$ sors umoris Scaliger: sursum oris codd. 197 ante hunc uers. lemma in GM quae (quea $M$ ) sint aduersa: spatium unius uersus reliquit $L$ quin Scaliger: quod ( $\operatorname{uod} L$ ) codd. coniuncta $G L^{2}$ : quod iuncta $L^{1} M$ repugna $M \quad 198$ aspicet aurum $M$

[^74]:    226 sunt Thomas: ut codd. censentur in ras. $L \quad 228$ pestisque Gronouius : positique GL Ven. : posidque M diuorum M 229 leo et Bentley: leo codd. $23^{1}$ ambigius $M$ : ambigius (cum ras. post bi : u sup. iu scr.) $L$ terris Ven.

[^75]:    232 ita Bentley: parsq. marina nitens (tutens $M$ ) codd. 233 aequali lege remixta Scaliger ${ }^{1}$ : atque illi degere (de genere $M$ ) codd. 234 ante hunc $u$. lemma in $G$ quae faecunda: in $M$ quae facundahabeantur anuciu $M^{1}$, corr. marg. al. man. 235 frustra (-ue sup. lin.add.: in lin. ras.) G 236 genus] gen' (cum ras.) $G \quad 237$ scorpius $L^{2} \quad 23^{8}$ similis $L^{1} M$ coniuncta (iun-in ras.) $L \quad 239$ et fundit $M$ : ef fundit (ef in ras.) $L \quad 240$ mixtum $L^{1}$ Ven. 24 I E $M$ creteo codd. 242 aequantem (cum ras. post -em) $G$ tempora $M$ : tempore $G L \quad 243$ genuos $M$ taurum (-que om.) $M \quad 244$ ante hunc $u$. lemma in $G$ que currentia aut recta : in $L$ marg. et $M$ quae sint currentia aut recia : spatium unius uersus reliquit $L$ nec] ec $L$ tu] ne Ven. ineo $L$ locasse Bentley: uocasse codd. 246 arqui tenens $M$ : arcitenens $G L^{2}$ : arcetenens $L^{1}$ toruus Ven. 247 librentur $L 249$ ante hunc u. lemma in GM et marg. L. qu(a)e sedentia aut iacentia uel] el $L$ zjo sopitus (ras. duarum litt. post-us) G 253 quaeue Breiter: contra LM:

[^76]:    contrat $G$ iacent Bentley: iacet codd. 254 scorpius $L^{2}$ pectore $G^{1}$ : corpore $G^{2} L M \quad 255$ obliquis $L 256$ ante hunc $u$. lemma in $G L$ marg. et $M$ quae sint debilia 258 libram Ven. 259 pde (e sup. pd scr.) ex pde $L$ : pde $M$ : pes Ven. cancro Regiomontanus: cancr $M^{1}$ : cancri $G L M^{2} \quad 260$ unum] uriū $M \quad 261$ nostro $M \quad 262$ pacientur dāpna $M$ 263 penderat $M^{1} \quad 264$ form̄tr $M \quad 265$ ante hunc $u$. lemma in $G L$ marg. et $M$ quae uerna (-lia $G L$ ) aestiualia (-tualia $G$ ) autumnalia (et $L$ ) hiemalia

[^77]:    267 uir $M \quad 268$ partes $G^{2} L$ terna Fayus : terrae codd. 270 ante hunc $u$. lemma in $G L$ marg. et $M$ quae [quae cauta et $L M$ ] eorum dextra aut sinistra (lege quae coniuncta et eorum quae) 272 forte $G^{2} L^{1} M \quad 273$ extremo signorum ut scripsi: ut dextro signorum codd. 277 partitus per compendium $M$ : partitur $G L \quad 279$ ex Ellis : et codd. 280 sagittarii codd. $\overline{\text { c̈spic }} M \quad 28 \mathrm{I}$ capricono $M \quad 283$ sortes Scaliger: tortis codd. distant Lucian Mueller: desunt codd. 284 causa] eusa $M$ sinistris Ven. 286 dextera $L$ Ven. $\quad 287$ at $M: \operatorname{ad} G L$ quae] huc $M \quad 289$ uirgola $L^{1} M$ 290 haec quadrata Bentley: haec ta (haecca cum ras. L) codd. fer $M$, cf. 305, 469 spectat post Capricornus add $G$ marg. rec. man. 291 hinc $M$ : hunc GL 292 leua codd. 293 consentur $G^{1} 294$ scilicet codd.: corr. Scaliger partes $L^{2}$ : partis $G L^{1} M$ diducere Bechert: deducere codd. 295 ternaque dett., cf. 278: terraque codd. quadrata dett.: quadrate codd.

[^78]:    effingere Bentley: fringere (r evas. L: ringere Ven.) codd. 296 reddentur Bentley : redduntur codd. 297 ante hunc u. lemma in GM de mensura
     in partes 298 ut add. Scaliger

[^79]:    304 fuerunt $M$ nati $G$ : natis $L M$ potēr $M, c f .290$ nomine $G L^{2}$ : nomina $L^{1} M$ Ven. $\quad 307$ tricente $M \quad 308$ ter $L^{2}$ : tunc $G L^{1} M \quad$ uicin(a)e $L^{1} M \quad 3^{\text {ro }}$ tris $M: \operatorname{tres} G L \quad$ perducti $L^{2}:$ pre( $\overline{\mathrm{p}}$ )ducti $G L^{1} M$ : praedicti Ven. $3^{12}$ si] ni Ven. patre $M \quad 313$ sint dett.: sunt codd. ternis dirimentibus Bentley (dirimentibus iam Bonincontrius): adiri (ãdri M) mentibus codd. 314 extremam Regiomontanus : extremum codd. primam $L^{1}$ : primamue $G L^{2} \quad 3^{15}$ uolens $G L^{1}$ numeriq: $L^{1} M$ Ven. $\quad 316$ quinagenas impleb̄̄ $M \quad 317$ finisque codd. 319 partis $L^{1} M$. $3^{23}$ post 325 collocat $G$ et uenit MVen. : euenit (ras. unius litterae inter e et u) $L \quad 325$ facit $M \quad \sin ] M L$ al. $m$ : in $G L^{1}$ Ven. suma $M 326$ subeuntis scripsi: subiunctis (sub iunctis $L$ ) codd.

[^80]:    328 tringinta $M$, cf. $322 \quad 330$ Namfragium $L^{1} \quad 331$ trigona $M$ : trigonas $G L$ $33^{2}$ quaterna $L M$ : quadrata tuaterna in quaterna corr. $G$ in partibus aut trinis, editio s. l. et a. in forma quartanaria : aut trinis paribus codd.: paribus faribus (linea per faribus ducta) $M$

[^81]:    337 iunctus Regiomontanus: cunctis codd. gnaret $L^{1} M$ : signarat Ven. $\quad 339$ liquet $L^{1}$ $L^{1} M \quad 34^{2}$ trigonis $L^{1} M$ : trigonos $G L^{2}$ Bentley 343 consummet $G$ : consensū Ven. $L M$ trigona Ven. $\quad 345$ concensum $M$ necum (c sup. cu scr.) $L$ : uecum $M \quad 346$ continuo Regiomontanus : continua codd. commertia $G \quad 347$ enim an partes codd. : corr. Bentley linei (?) $G^{1} 348$ detractetque codd.: corr. Bentley 349 efficiat Scaliger: efficiet codd. 350 iubet Scaliger: iunet codd. procede M 352 sed maior ius (sed maior in ras. : longe sup. lin. add.) $L \quad 353$ quadratus $G^{1} \quad 354$ summota $G$ : submoto $M$ : sub moto $L \quad 355$ credit $M \quad 356$ proprius $L^{1}$ terras] intras $M \quad 357$ infectum $G$ : ineffectum (ef punxit $L$ ) $L M$ demittit detf. : dimittit codd. : dimittit noster in Ven. 358 ante hunc u. lemma in GL marg. et $M$ de signis exagonis quin dubia scripsi: dubiaque $G^{1}$ : duuaq; $M$ : deuiaque $G^{2}$ : euiaque $L$

[^82]:    $M L^{1}$ : praedat Ven. : pertales $G L^{2}$
    formatur Ellis: formantur codd. 363 curuantur $L^{1} M$ Ven. $\quad 365$ tum Bentley: quo codd. regentem $M$ 366 auersaque Tauri Huetrus : aduersaque tauro codd. ${ }_{367}$ finit] sunt $M$ caeperat $G \quad 368$ alterius $M$ : ulterius Ven. : alternis $G L$ est Scaliger: et codd. $\quad 8-9$ inter se transposuit $G$

[^83]:    aequalis $G L \quad 428$ tempora quȩ $L \quad 429$ permixtusque scripsi: permixtosque codd. medis $M$ inter hiemem $G^{1}$ 430-1 ita interpunxi $43^{1}$ infestos $M$ : infesto (ras. in fine) $L$ decertent $G L$ : decernent $M$ : decernet Ven. 432 uers. seclusit Bentley

[^84]:    433 ante hunc u. lemma in $G$ signorum commercia et quae cuique Dó attribuantur signa: in $L$ marg. et $M$ sub cuius dei tutela queque signa sint anim aduersis $M$ debes scripsi: rebus codd. 435 quae cuique (quoique dedi) dett. : quae quique $M$ : quaecuqq(ue) $G L \quad 437$ ut $L^{1}$ numine $L^{2} 439$ ante hunc u. lemma in $G$ signorum commercia 441 regis GM: regit (-it in ras.) ex rigit L 443 Mauorti Regiomontanus : Mauortis codd. 444 patris $M \quad 446$ ex Ellis : et codd. Inuonis $M$ : Inonis (post Iu- una litt. eras. : n suprascr.) $L$ futura $L$ 449 per Ven. : fer $L^{1}$ : fert $G L^{2}$ : fers $M$ curret $L^{1} M$ Ven. : curat $G L^{2}$ 450 petens Ven. $45^{I}$ diuina Bonincontrius : diuisa codd. $45^{2}$ exaequentque $G L^{2}$ : exe ...cum ras. $L^{1}$ : exeu quen $M$ 453 ante hunc u. lemma in GM quae membra humana cuique signo attribuantur (tributa $\operatorname{sint} M) \quad 454$ in propriis $G L^{2}$ : inproprias $L^{1} M$ : in propria ... figura Ven. 455 praecipua $M \quad 456$ exercent (post er unius litt. ras.) $G$

[^85]:    457 sortitus Scaliger: sortitur (sortitr${ }^{\text {r }}$ LM) codd. sensusque $M$ colla dett.: collo codd. 458 geminos Bentley: geminis codd. 459 connexa $G \quad$ humeris codd. 460 crancro $M \quad 461$ sorte $M$ 462 regit $G L^{2}:$ reget $L^{1} M \quad 464$ imperitat Bentley : imperat et

[^86]:    466 ante hunc $u$. lemma in $L$ marg. et $M$ signorum commertia auditus uisus mores (lege amores) odia : in $G$ signorum commertia 469 foedus ue geī $M$ 471 iccirco $G$, ut saepe : id circo $M$ nonnunquam $G$ : nouū quam $M$ : non umquam $L \quad 473$ se $M L^{1}$ : sese $G L^{2}$ generant $G$ : gerant $L M \quad 474$ at triquetris orti scripsi: a triquetrisque orti iam Housman : utrique trisorti $M L^{1}(?)$ : utrique sorti $G L^{2} \quad 476$ ad fectus $M$ : dfectus $L$ quoque dius (linea per dius ducta) $M$ astra $L^{1} \quad 477$ ocul (ras. in fine: suprascr. os) $L$ 479 possent $G$ : possint LM 483 hominum] rerum Ven. 486 se Scaliger: si codd.: (silibramque $L^{1} M$ ) 487 nectit om. add. marg. rec. man. G 491 indutusque geminorum Ioui $L^{1}$ est add. Bentley aures $L^{2} \quad 493$ animus Scaliger: animum codd.: ipso sanimum $M 494$ conditus Scaliger: conditur $G L^{2}$ : conditor $L^{1}$ : condito rastro $M \quad 495$ uertunt $G$ : uertitur (insemet uertitur signis transpos.add. L) $L M$ oculos Bentley: oculis $L M$ : oculusque

[^87]:    $\mathrm{G}^{1}$ : oculosque $G^{2} \quad$ in mutua $G$ : inmuta $M$ : immutaque $L \quad 496$ cancri $M$ : cancer $G L 497$ At $G:$ Ad (Adleo) $M:$ A (cum ras. : t suprascr.) $L$ aurê (e in ras.) $G$ 498 Centauro gemino Bentley: centaurus codd. geminos $G L^{2}$ : geminos et $\left.M\left(L^{1}\right\}\right)$

[^88]:    500 sagitifero $M \quad 502$ infra om. add. marg. rec. man. $G \quad 503$ oditque Bentley: auditque codd. 504 arquitenens ex $M 507$ erigonen $M$ : erigonem $L$ : erigonẽ $G \quad$ capricornus (capricor-in ras.) $L \quad 508$ uisūs $G$ angusti $L$ 5II adnudus $L^{1}:$ corr. $L^{2}:$ adundus $M$ aurem $G L^{2}$ : aurum $L^{1} M$ 513 sagittiferi (sagitti- in ras.) $L \quad$ pisces (post -es ras. unius litterae) $G$ arrem $M \quad 514$ dixere $M \quad$ adtendere $L^{1} M \quad 515$ finxit finx (sic) $M$ 516 similes codd. sensus dett. : census codd. 517 alios $G L^{2}$ : alius $L^{1} M$ 518 ducantur $G$ : ducuntur $L M \quad 519$ captantur $L^{2} \quad 520$ etiam ipsa meant aduersa scripsi : aduersa meant \& iā (\& iāq; $L^{2}$ ) codd. 523 arquitenens $M$ : arcetenens $L^{1}$ arcitenes $G$ trigono $L^{2} M$ : trigona $G L^{1} \quad 524$ ucrs. om. $M$ ferae Bentley: suae codd.

[^89]:    533 ergo recedit codd.: corr. $L^{2} \quad 534$ homines uictis scripsi mutata interpunctione: hominis uictus codd. quod $L^{1} M$ : quo $G L^{2} \quad 535$ nascenti $M$. trigono $L^{1} M$ : trigonum $G L^{2}$

[^90]:    536 seclusi 541 gentis codd.: corr. $L^{2} \quad 542$ et Geminis et si quos Bentley: gemini pisces (piscio $G^{l}$ ) quos $G L \quad$ protulit $G$ : pertulit $L$ urna Bentley: unda GL uerba gemini . . . unda om. M 543 partus Gronouius : partes codd. nato $M 44$ scorpius codd. 545 pisces $L^{2}$ : piscis $G L^{1} M$ at quos Scaliger: atque hos codd. 547 genitus $L^{1}$ Ven. femina $L$ ledunt $G$ : ludunt Ven. 549 auersi dett.: aduersi codd. 550 rabidique dett. : rapidique codd. 551 et a Gronouius : sed codd. 552 Et rigone M Cancrumque Bentley : taurumque codd. 554 et om. ( \& suprascr.) $L 556$ quaeque dett. : quique codd. trigoni Ven. 557 hostis codd. 559 Erigonen Regiomontanus : erigonē $L$ : erigone $G$ : et rigone $M$ 560 sagittarii (sagittiferi $L^{2}$ ) codd.

    56I libraque $G L^{2}$ : libräque $M$ :

[^91]:    libramque $L^{1}$
    562 legem iubentem $L^{1}$
    $562^{2}$ uide Commentarios 564 Ad $L^{1} \quad 565$ inpugnam $M$ : ad pugnan $G L \quad$ Nemeaeus Bentley: nemeus codd. agitat Ven. 567 Piscibus Scaliger: pisces codd. exortos Ven. : exortus codd.

[^92]:    569 sagittarii $G L^{1}$ ：sagittiferi $L^{2}$ sidere $G L^{2}$ ：sidera $L^{1} M$ nati］ muti $L^{1} M$ ：multi Ven． 571 generat Regiomontanus ：generet codd． bella Housman：uelle codd． Housman ：quoque codd．quaecunque dett．：quicunque GLVen．：qui－ 572 plerunque $G$ 574 quippe cáque $M$ ， 577 ne sit Regiomontanus ：nec sit $M$ ：nescit $G L$ foedus Scaliger：ph（o）ebus codd． trigoni Regiomontanus ：trigona codd．$\quad 58 \mathrm{I}$ iccirco $G$ exemet $M$ 583 erat dett．：erit codd． 584 lis $G^{2}$ ：leuis codd．$\quad 585-6$ seclusi 585 quom Postgate：quod codd． 587 rerum $M$ sponsor Regiomon－ tanus：sponso codd． 588 reum $L$ 591 querat $M$ ac $M$ ： et Ven．quanta est］quantae GVen．moles dett．：mores LM：mortes $G$ 593 quaque $M \quad 593^{\text {a }}$ uide Commentarios 594 sepulchra $M$

[^93]:    $594^{2}$ uide Commentarios
    595 reliquit $G$ ：relinquit $L M$ Ven．
    596
    quod $L^{1} 598$ insidias（－que om．add ead．man．）$M$ cedes codd． maenibus $G \quad 599$ crassantem $L M \quad 600$ populo $L$ ：populos $G M$
    habundant $L M$

[^94]:    pingitur $L$ 666 compare Dorvillius: corpore codd.

    667 scorpius
    codd. censentur $G L^{1}$

[^95]:    668-9 post 686 collocaui 671 affines $G L^{2}$ Ven.: adfines $L^{1} M$ gradibusque Scaliger: grauibusque codd. post 672 collocavit Jacob 683-6 683 quotquot $G L^{2}$ : quod quod $L^{1} M$ uersum cum Breitero seclusi 684 in partes $G L^{2}$ : in partis $L^{1}$ : inpartib; $M$ diuisi Scaliger: diuisit codd. 668 quadrala... templa $M \quad 674$ mensis $M \quad 675$ mutantes $M$ (?) 677 atque $M$ Ven. sub mota $L M \quad 678$ sic nos] dignos Ven. 689 ex ipsis $M: \mathrm{I} / / \mathrm{psis}$ (cum ras.) $L \quad 690$ mox certo om. $M \quad 69 \mathrm{I}$ racione repetenda $M \quad 692$ pacata infestis $G$ : pacatam infectis $L$ Ven.: pacatam inferens $M$ dignoscere (dinoscere dedi) Bentley: perdiscere codd. possis $G$ : poscis LM 693 ante hunc $u$. lemma in $L$ marg. et $M$ de duodecathemoriis (duodecat ne moriis $M$ ) que sint et quas uires habent : spatium duorum uersuum reliquit $L$. 694 signare $L^{1} \quad$ passam $G$ : passum $L^{1} M$ : possum Ven. : passim $L^{2} 695$ duodecate moria $G$ : duo decate moria $M$ : duo decathemoria $L$ titulo Scaliger: titulos codd. 696 partes $L^{2}$ : partis

[^96]:    GL1M 699 uersum om. $G$ $L$ : duo de cathemorium $M$

    700 duodecate morium $G$ : duo decathemorium constat Bonincontrius : constant codd.

[^97]:    702 numero Regiomontanus: numeros $M$ : numeris $G L \quad 709$ errant $L^{1} M$ : errat $G L^{2}$ humana scripsi: matura $M^{1}$ : natura $G L M^{1}$ corr. 710 femia $G^{1}$ sidere Bentley : sidera codd. 712 duodecate moriis $G$ : duo decathe (te $L$ ) moris $L M \quad 713$ quod (quot dedi) $M$ : quid $G L$ sint dett. : sit codd. constent $L$ : constet GM 714 ne ex corr. $L$ : nec codd. 715 suo $L^{2}$ : sua codd. : suas Ven. $\quad 716$ uicinae Bentley: uicinis codd. actribuuntur $L$ (cum ras. post -bu-) M 719 sidere Bentley: sidera codd. 721 ex actis $M \quad 722$ gemis $G^{1} \quad 723$ inque $G L^{2}:$ in $L^{1} M \quad 724$ deduxitque codd. : corr. Scaliger queri M 726 quaecunque Regiomontanus: quocunque codd. parti (parte iam Regiomontanus) Scaliger: partu codd. tempore dett. : tempora codd. 728 quia $L^{8} M$ : quae $G L^{2} V e n$. (totidemqufulgent sic $L$ ): fulgent $\mathrm{om} . M \quad 730$ qua $M$ : quae $G L V e n$. et] ex Ven. hunc $L^{1} M$ : hinc $G L^{2} \quad$ 731 pariterque $L^{1} M$ : pariter

[^98]:    GL² Ven:
    sequentia Regiomontanus : sententia codd.
    ducunt $L M$ : ducit $G$ $73^{2}$ ubi $L^{3}$ : tibi $L^{2} M$ : ibi $G L^{1} \quad 734$ dimidia $M$ : dimidiam

[^99]:    735 qua destituent te (destituente $M$ ) iustum codd. : corr. Bentley736 duo decathemorium $M$ : duodecate morium $G$ : duo decathemoriis $L$ 737 suo om. GL sicut LMVen.: uelut G stant GLVen. : st $M$ 738 ante hunc u. lemma in $L$ marg. et $M$ de duodecathemoriis aec $L$ fallit perspicere $M$. 739 post 822 collocaui 740 duo decathemorii $L M$ : duodecathemoriis $G \quad$ quid sit $L^{2}:$ quod sit $G L^{1} M$ 740-41 inter se transposuit $M^{1}$, corr. $M^{2} \quad 74 \mathrm{I}$ duodecathemorium $G$ : duo decathemorium $M$ : duo decathemorum (i suprascr.) $L \quad 74^{2}$ partes $L^{2}$ : partis $G L^{1} M \quad 744$ uires om. $G L^{1}$ : -que dett. : qui codd. in eis $L^{2}$ : in meis GLL ${ }^{1}$ : mueis $M$ iura Regiomontanus : cura codd. 745 locata е $M \quad 746$ duodecathemorio $G$ : duo decatemorio (a in ras. : t sup. em scr.) $L$ : duo decima temorio $M$ fuerint $G$ : fluerint $L M$ in 747 stella in fines in Bentley: stellae in fine sint codd. 748 inciderit Bentley: inciderint codd. inuiribus codd. 750 utrum $M^{1}$ proprior $M$ cuncta om. $L^{1} M \quad 75^{6}$ per $M:$ p||| (sic) L: et GVen. tum ponitur Scaliger:

[^100]:    cingit Ven. $\quad 794$ princepsque (i in ras.) $M$. 795 ter tuis exelsi (l in ras.) signa $M$, cf. 812 fastigia dett. : uestigia codd. 796 qua Breiter: quo codd. an(h)elis dett. : habenis codd. 798 fundatos $L^{1}$ 799 finis (-que om.) $L^{1}$ cadendi $L^{2}$ : canendi $G L^{1}$ Ven. : cauendi $M$ 801 praecapuas $L^{1}$

[^101]:    codd. aras $G \quad 829$ hic $M$ horo scopus $L$ haec $G^{1}$ externum $M$ : extremum $G L$ : extraneum $V e n$. quia $L^{2} M$ : qua $G L^{1}$ nomine dett. : numine $G L^{2} M$ : minime $L_{1}^{1}$ 83I hunc] hinc Ven. penes Housman: tenet codd. est add. Housman 832 ducet (-que om.) M

[^102]:    839 coniugia atque Bentley : coniugiatque atque $M$ : coniugeatq; $L^{1}$ : coniungitque $G L^{2} \quad 840$ ouaque $M$ ortus $G^{1}$ : cetus $G^{2} \quad 841$ ante hunc u. lemma in $G \quad L$ marg. et $M$ diuisio aetatis in partes (incartes $M$ ) caeli 841 quoda $M \quad 844$ quicquod $L^{1}$ curuantur $G^{1} \quad 845$ aestatis $G$ adserit $M$
     codd. occasu scripsi (malim occasust) : occasus codd. contermina quaeque scripsi: interminumque $M$ : interimumque $L$ : interimum quam $G$ 850 regit haec maturae dett. : matur(a)e regit (hoc suprascr. $L^{2}$ ) codd. 852 At] $t M$ redeuntis ab Ellis: redeunte sub (redeunt esubimo $M$ ) codd. 853 sub pinatum $G \quad 859$ cardoque $M \quad 860$ mundi etenim dubitanter scripsi : uincit enim codd. legeque $M \quad 863$ esterilis $M$ poenam

[^103]:    referentia Bentley: poenamque ferentia (-cia M) codd. seclis G 866 e $L^{1} \quad 868$ uel scripsi: neu codd. praestite Jacob: praestit $M$ : praestat $G$ : prestet $L$ 870 porta Scaliger: orta $M$ et ex ortal $L$ : ora $G L^{2}$

[^104]:    Scaliger: opus codd.
    897 demonien codd. Housman: in uersu (inuersu $M$ ) codd. menque demouemque $M$ : numen ( q ; suprascr.) $G$ monumenta Ven.

    898 inuersus
    899 condelo cumnu900 magnus $M$ 901

[^105]:    902 ante hunc $u$. lemmatis instar in $M$ PER TANTA PERICVLA MORTIS : spatium unius uersus reliquit $L \quad 903$ Viribus $G$ : iribus $L$ ambiguam Ven. geminum $G$ casusne deine Breiter: causasque (causaque $L^{2}$ ) deique (diesq; Ven.) codd. 904 utramque $G$ : utraque $L M \quad 907$ habet Regiomontanus : aut codd. quo quia Ellis : quoque codd. aut .. quoque om. Ven. 908 detergent scripsi: decernunt codd. fortuna inexuiribus $M \quad 909$ concipiunt Regiomontanus: concupiunt (concupunt $L^{1}$ ) codd. 910 huic Regiomontanus: huc codd. 9 Ir iterumque $G L^{2}$ : iterum $L^{1}$ : uerum $M \quad 912$ martisque Ven. 913 dominā magnoscit $M$, corr. man. rec. $\quad 915$ dampnosis $L \quad$ mutantem $M$ orbis Bonincontrius: oris codd. uersum seclusit Bentley 918 accliuia Bonincontrius : decliuia codd. $\quad 920$ culmiaque Scaliger: : cul muicque $M$ : culmineq. (e cum ras. L) GL \& int ortus (linea per \& ducta: et sup. ortus

[^106]:    scr.) L 921 libratum $M$ : librarum GL 922 adserit $M$ sedent $M .924$ quaque scripsi, sublato post regit puncto: perque codd. huic scripsi: hac $G L$ : haecredita $M$ : redita $L^{1} \quad 925$ niset $M$ : his et Ven. coniugia $M$ : conubia $G L \quad 926$ uentrem $G$ mou|re (e suprascr.) $G \quad 928$ logo $M$ conpendi acar mine $M$ praestem Scaliger: pr(a)estent codd. 929 At $L^{2}:$ ad $L^{1} M$ Ven. : aut $G$ quae Ven. 930 suspicit dett. : suscipit $G L$ Ven. : inscipit $M \quad 93$ r iacent Ven. 932 sua fatigat $M$ 935 priua scripsi : prima codd. deorum $G^{1}$

[^107]:    964 subsistunt $G \quad 967$ effectusque $G L^{2}$ : effectosque $L^{1} M \quad 968$ quoi Scaliger: qui codd. arcem G 968-70 cum Breitero seclusi 969 octotopos Scaliger: octo tropos (octo in ras. L) codd. Subscriptio in G EXPLIC̄ LIB. SCDS PREFATIO LIBRI TERTII: in $M$ M. MANLII BOENI ASTRONOMICON IIBER II EXPLICIT FELICIT INCIPIT TERTIUS

[^108]:    ${ }^{1}$ The use in it of $\kappa \delta \sigma \mu o s$ as $=$ mundus seems to show its un-Hesiodic character.

[^109]:    ${ }^{1}$ I owe these references to the kindness of Professor Paul Vinogradoff.

[^110]:    1 The sun has entered Capricorn on Dec. 23 only once (by Greenwich time) since the institution of the Gregorian Calendar : it will not do so again till A. D. 2303.

[^111]:    ${ }^{1}$ Capricorn is the 'house' of Saturn.

[^112]:    ${ }^{1}$ The importance for our calculations of this market day will appear later.

[^113]:    ${ }^{1}$ Guerre Civile ii. 299-304.
    ${ }^{2}$ See the proof, with reffs., in Rice Holmes' Ancient Britain, p. 709, note 2.

[^114]:    ${ }^{1}$ The principal difficulty is that alleged by Soltau, p. 54-the eclipse of the moon in 63 B.C. at the time of the Feriae Latinae : Cicero De Suo Cons. ii. 11 -19.
    ${ }_{2}$ The Catalogue says ' Fra. Bernard'. Fra. Bernard once in a letter to W, Lilly (MS. Ash. 242, 85 b) mentions Manilius. But his interests were almost wholly in modern astrology.

[^115]:    1 I borrow this convenient phrase from Bouché－Leclercq．

[^116]:    ${ }^{1}$ But $\delta \omega \delta \epsilon \kappa \kappa$ árpotos is used for 'the Zodiac' by Vettius Valens (supply रра $\mu \mu$ ' $)$ Astr. Cat. v. 2, p. 93, and 3ro, note 5.

    * In the passages which 1 have marked with an asterisk Thielscher is, I think, probably wrong. For in these the readings reported by Ellis or Loewe are found in the Holkham MS.-a MS. which is, I have now no doubt, derived directly from $M$.

[^117]:    ${ }^{1}$ cura et causa item confunduntur in libris apud Tibull. iii. 2. 29, Culex 264.

